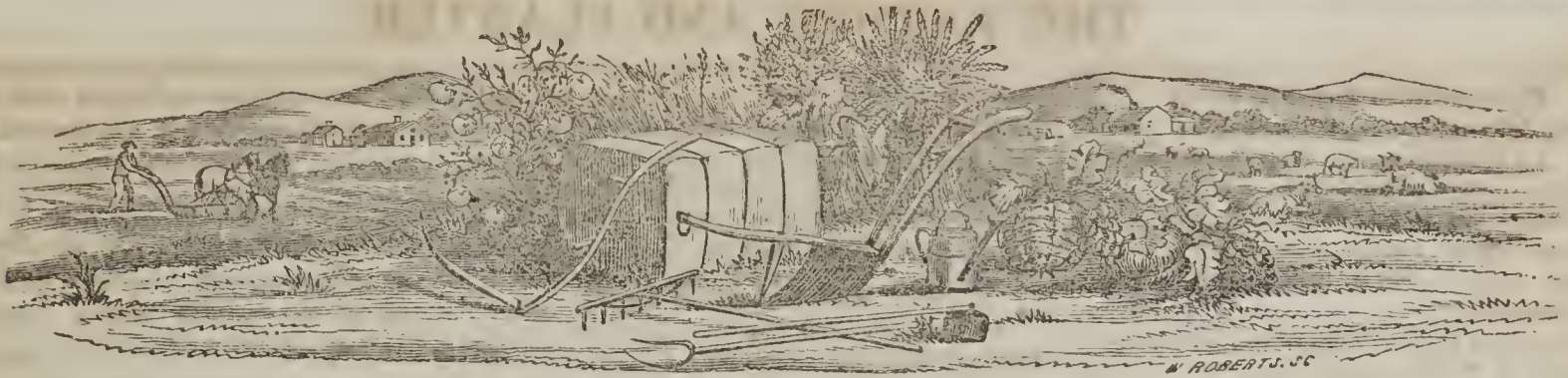


Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



FARMER AND PLANTER.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANICS, DOMESTIC AND RURAL ECONOMY.

VOL. II.

PENDLETON, S. C., JULY, 1851.

No. 6.

The Farmer and Planter

Is published monthly at Pendleton, S. C.,

BY GEO. SEABORN & J. J. GILMAN,

Editors and Proprietors.

TERMS.

1 copy, one year (invariably in advance), \$1
6 copies one year (directed to one office), 5
25 copies, " " " " " 20
100 copies, " " " " " 75

All letters, except communications for the Farmer and Planter, must be post paid to insure attention.

Advertising and Job work done on reasonable terms.

Rise and Fall of Sap in Trees.

WHAT curious hallucination is that which supposes the sap of trees to fall or settle, in the winter, into the roots! One would have thought that the notorious difficulty of cramming a quart of water into a pint measure, might have suggested the improbability of such a phenomenon. For it certainly does require a very large amount of credulity to believe that the fluids of the trunk and head of a tree can, by any natural force of compression, be compelled to enter so narrow a lodging as the root.

We shall assume the word sap, to signify the fluids, of whatever nature, which are contained in the interior of a tree.—In the spring, the sap runs out of the trunk when it is wounded; in the summer, autumn and winter, it does not, unless exceptionally, make its appearance. But in truth the sap is always in motion, at all seasons and under all circumstances, except in the presence of intense cold. The difference is that there is a great deal of it in the spring and much less at other seasons.

When a tree falls to rest at the approach of winter, its leaves have carried so much more fluid than the roots have been able to supply, that the whole of the interior is in a state of comparative dryness, and a large portion of that sap which once was fluid, has become solid in consequence of the various chemical changes it has undergone. Between simple evaporation on the one hand, and chemical

solidification on the other, the sap is, in the autumn, so much diminished in quantity as to be no longer discoverable by incisions. The power that a plant may possess, of resisting cold, is in proportion to the completeness of this drying process.

When the leaves have fallen off, the tree is no longer subject to much loss of fluid by perspiration, nor to extensive changes by assimilation. But the absorbing power of the roots is not arrested; they, on the contrary, go on sucking fluid from the soil, and driving it upwards into the system. The effect of this is, that after some months of such an action, that loss of fluid which the tree has sustained, in autumn by its leaves, is made good, and the whole plant is distended with watery particles. This is a most wise provision, in order to insure abundant food to the new born leaves and branches, when warmth and sun shine stimulate them into growth.

During all the winter period, the sap appears to be at rest, for the re-filling process is a very gradual one. But M. Biot proved, many years ago by an ingenious apparatus, that the rate of motion of the sap may be measured at all seasons, and he ascertained it to be in a state of activity in mid-winter. Among other things, found that frost had considerable influence upon the direction in which the sap moves. In mild weather the sap was constantly rising, but when frost was experienced the sap flowed back again—a phenomenon which he referred to the contracting power of cold on the vessel of the trunk and branches, the effect of which was to force the sap downwards into the roots, lying in a warmer medium; then, again, when the frost reached the roots themselves and begun acting on them, the sap was forced back into the trunk, but as soon as a thaw came and the earth recovered its heat, the roots out of which a part of the sap had been forced upwards, were again filled by the fluids above them, and the sap was forced to fall. A large poplar tree in the latter state, having been cut across at the ground line, the surface of the stump was found to be dry, but the end of the trunk itself

dipped with sap. Sap, then, is always in motion, and if it ever settles to the roots in a visible manner, that is owing to temporary causes, the removal of which, causes its instant re-ascent.

As to the idea that the bleeding of a tree begins first at the root, and in connection with this supposition, that what is called the rise of the sap is the cause of the expansion of buds and leaves and branches, nothing can well be more destitute of any real foundation. If in the spring, when the buds are just swelling, a tree is cut across at the ground line, no bleeding will take place, neither will the sap flow for some distance upwards, but among the branches the bleeding will be found to have commenced. This was observed some years ago by Mr. Thompson, at the time the Duke of Portland's gardener, who thought he had discovered that the sap of trees descends in the spring, instead of ascending; which is a strange speculation enough, it must be confessed. The fact is, that the sap is driven into accelerated motion first at the extremities of a tree, because it is there that light and warmth first tell upon the excitable buds. The moment the buds are excited they begin to suck sap from the parts with which they are in contact: to supply the waste so produced, the adjacent sap pushes upwards; as the expansion of the leaves proceeds, the demand upon the sap near them becomes greater; a quicker motion still is necessary on the part of the sap to make good the loss; and thus from above downward is that perceptible flow of the fluid of trees, which we call bleeding effected.

The well known fact of trees sprouting in the spring, although felled in the autumn, proves that the sap had not at that time quitted the trunk to take refuge in the roots. Such a common occurrence should put people on their guard against falling into the vulgar errors on this subject.—Professor Lindsey.

CONSTANT dropping wears away stone; by diligence and patience, the mouse ate away the cable; and little strokes fell great oaks.

Treatment of Scarlet Fever.

THE following communication comes from a gentleman, in whose judgement we have entire confidence.

Cleanse the stomach by a mild emetic, such as warm water or ipecac, (but not emetic tartar—it is too prostrating for this disease.)

When the fever rises, wash the patient all over in warm water, rendered a little slippery, between the thumb and finger, by white ley or saleratus. As frequent washings will be required—that is, as often as the fever rises—a soft towel should be used, and very gently, so as not to make the skin sore. On this account, when the skin is thoroughly cleansed, less ley should be used; and if the patient becomes sore, a little rich milk in the water, may be substituted.—The feet should also be bathed in warm weak ley.

Such washings operate like a charm; and have never failed, under my observations, to put out the fever as water puts out fire—for a time; but frequent repetitions will be necessary. A girl in my family, was washed ten times in one day; and a neighbor who was very weak before he came under my care, was washed twenty times in one night. The effect of these applications is most salutary and soothing. I have seen a child of five years old, who was taken from her bed, crying and moaning, become playful as soon as she was washed. Another child, on whom the fever had risen high in the night, was cooled off by the same process in a few minutes.

Warm water is more soothing and agreeable than cold water, which, latter, ought not to be applied in this disease, on account of its producing re-action.

If the throat is much swelled, surround it with a cloth containing hops sprinkled with hot vinegar, and extending upwards above the nose, so that the patient may smell the fumes. Volatile liniment—made by turning *aqua ammonia* into sweet oil in a phial, and shaking it well—may also be applied round the throat, to irritate the skin as a rubefacient.

The strength of the patient should be carefully preserved, hence neither *bleeding* nor *strong cathartics* are admissible.—Some, indeed, live through such improper treatment, because scarlet fever is one of the most variable diseases, in regard to intensity: on some, being very light, and on others, very severe. The more urgent the case, the greater is the danger from bleeding. *The patient has not one drop of blood to spare*—no more than he would have in typhus; and strong purgatives are scarcely less improper. Only the mildest cathartics, like tamarinds, should be employed; but as elder-flower tea is both sudorific and aperient, in most cases no better medicine need be sought. Decoctions of slippery elm, catnep, or sage, may be used where elder-flowers are not to be had.

After the fever has ceased, children often become pale and bloated; and a near neighbor lost a fine boy under the care of a regular physician, when the disease seemed over and past. In all

cases, however, that have come to my knowledge, a dose of calomel, when given, has roused them from that torpid state, and they have rapidly recovered.

Be very careful, for many days after, not to take cold.—*Albany Cultivator*.

Deep Soil and Deep Roots.

A. J. DOWNING says, "I have seen the roots of strawberries extend *five feet* down into a rich deep soil; and those plants bore a crop of fruit five times, and twice as handsome and good as the common product of the soil only one foot deep."

The average vertical depth to which roots descend into well disintegrated soil, is thirty-four inches, and their length, as above stated, is often much greater; but the horizontal travel is occasionally very great, and gradually deepening to thirty-four inches. If a hill of corn be raised upon an artificial knoll, formed of well disintegrated soil, and, when ripe, the top of the stalk be fastened to a gallows-frame, and the earth be washed from the roots, so as not to abrade them, they will be found to measure five and a half feet in length, and many of them so fine as to be singly invisible to the naked eye; but like the ultimate fibres of silk, when several are conjoined, are easily observed.

With these facts before us, who can doubt the necessity of deep plowing.—*Working Farmer*.

Yellow Clover.

FORKLAND, GREEN CO., ALA., }
May 16th, 1851. }

MESSRS. EDITORS:

As there appears to be considerable anxiety manifested among the planters of the South, to obtain information relative to the Yellow Clover, I have concluded to state a few facts (in a plain way) in relation to this valuable production. I have been raising it for a few years, and consider it a rich boon to any southern planter, who will take the necessary pains to get lots and pasture grounds well set with it, it being a succulent and highly nutritious food for stock of all kinds.—It is most excellent for milch cows, and when they can get plenty of it give an abundance of the richest milk. [This clover, like almost every thing valuable, requires care and attention to get it started. A good many persons, after having purchased seed, have not succeeded in raising it for the want of proper care and attention. Some have failed from the want of proper seasons, as was the case last fall; others from sowing on soil too poor to produce any thing. Those who expect to raise it on a soil as poor and arid as the desert of Arabia, will be mistaken, unless they put on a little manure.

The proper time for sowing, will be from the middle of September to the last of October, whenever there is seasonable weather during that time; it will then

come up and have sufficient root to stand the early frost.] Last season was unfavorable for sowing new lots, as it could not be sown until November, and about the time it was coming up there was some cold freezing weather, and a great many of the young plants were killed in the sprout. Every one knows that the same disaster happens to small grain of all kinds. [Lots that have been producing the clover for several years, will never fail to produce it in great abundance with the most unfavorable season, for the reason that there is always such an abundance of seed in the ground.] It is growing luxuriantly on my yard where a few seed were accidentally thrown, and continued to spread annually, until it is at this time a beautiful, luxuriant green. [This clover appears to grow well on stiff, argillaceous soil—and also on sandy soil, if a little trod or cow-penned. A degree of fertility is necessary for its luxuriant growth. I would advise gentlemen that can procure but few seed, to sow them with care, on cow-penned or manured lots. It should be sown out of the reach of poultry as they are exceedingly fond of it, and will destroy it when young and in small quantities. Hogs also destroy it, as they are fond of the roots of the clover which they search after. I would here observe, that it is excellent food for swine, and when cut and fed to them, they eat it with great relish, and grow fat.

This clover should not be covered deep, when sown, or it will not come up. The method I pursue is, to break up the ground, sow the seed broad-cast, and harrow or brush them in. It is also well to run a roller or clod crusher over the surface. This clover will spread rapidly from a few bunches, and lots that are thinly set one year will be well stocked the next season. Yet there is not the least danger to be apprehended of its interfering with any other crop. It has only a centre root, and the branches run off in every direction from the centre.—The branches are vine like, and run on the ground when a single bunch stands alone. But when it grows thick the branches support each other, and it grows to the height of several feet. The branches grow from three to five feet long on good soil. The seed grow along the branches in clusters, contained in a burr of considerable toughness, which hold from four to six yellow, bean-shaped seed. The toughness of the burr makes it difficult to clean the seed out. It is now

seeding and the seed will ripen by the 1st of June. A crop of cotton or corn can be made on the same land that is bearing clover, and seed enough left to reproduce the clover. This is accomplished by leaving a small strip of land unplowed, until the seed ripen. I made a crop of cotton on one of my clover lots last year, and now have a fine, luxuriant growth of clover on the same lot.

I have heard from a reliable source that some farmers from the States of New York and New Jersey, have purchased worn-out farms in Virginia. They, in the first place, manure the land so that it will produce clover (the red clover is used by them, as it is suited to that climate), and when the fields are well set with clover they turn it under with the plow, and sow in wheat making forty or fifty bushels per acre upon land that was considered almost worthless. Land could be improved with the yellow clover in the same way. A few loads of manure thrown on galled places, and sown in yellow clover would be in a few years restored to fertility, and at the same time afford good pasturage. I have not stated how much seed should be sown to the acre—I suppose two bushels, in the burr, would be sufficient. We sow here altogether in the burr, for the reason that it is so difficult to clean out.

I do not know that I can supply seed to be sent to a distance except by letter; when thus sent the price will be one dollar per ounce. All letters addressed to me on the subject of clover seed, must be pre-paid to receive attention.

Your ob't serv't.

H. L. KENON.

A Chicken with four Legs.

MESSRS. EDITORS:—A chicken with four legs was hatched out on the premises of J. J. BROOKER, the first week in May, 1851; it is now about fifteen days old, and looks promising. The anomalous, or fourth legs, come out near together, at the extreme end of the loin bone—are inverted and crooked at the first joint—consequently are useless. They are fully as long, but not quite so large as those coming out at the natural place.

Barnwell, S. C. A SUBSCRIBER.

Report on manures

WITH other papers we have received from some person, unknown, the following report on manures to the Black Oak Agricultural Society. We are not aware that it has had a general circulation, and think that we are giving a valuable paper to cotton growers who have not had the pleasure of seeing it. The report is confined "to the consideration of manures for cotton," and its length will not deter any one who commences it from reading it to the conclusion.—The space occupied by it could not, in our judgment, be put to a better use.

THE committee on manures, in pursuance of the resolution under which they are required at the fall meeting of the society, to report, concerning "the best

and most economical mode of collecting and preparing manures; the time and manner of their application; the adaptation of certain manures to certain crops; with a detailed account of all experiments on the subject which have been carefully conducted, and the results accurately noted;" beg leave to observe, that the wide range of duty committed to them, requires more time than has elapsed since their appointment. Sensible, however, of the vast importance of the subject, they have entered seriously and faithfully into the discharge of their duty, and offer the following as a report, only in part.

It is due, however, to the society to premise, that the direction which has been given to our labors, is one which can hardly be said to be comprehended in the resolution under which this report is presented. Believing, however, that the points to which we are desirous of drawing the attention of the society are of vast importance to our interests, we offer no apology for our apparent deviation from the letter of the chart laid down for our governance.

It is but a very few years since, within the limits of the society, the benefits of manures were mooted at every social meeting; and even now, though no one is so outwardly heretical as to question their utility, there are yet many who have derived so little practical benefit from their application, that their faith in their efficacy is rather a confidence in the testimony of others, than the result of their own observation and experience.

Believing firmly, as we do, that on the judicious use of manures depends the prosperity, not only of our society, but of our state, we have devoted our labors to an investigation of the causes of the failures of manures, and have endeavored, with the aid of our present state of knowledge, to point out the remedies.

The great object of all farmers, both practical and theoretical, has been to accumulate and bestow upon the land a quantity of animal and vegetable matter in the state of progressive decomposition. This manure, called compost, has been for many years past, the only sort applied to our cotton husbandry in the inland districts; its value depends upon its origin; that from the stable always being much more highly esteemed than the product of the cow pen. These were the manures universally applied to all soils, whatever their condition. Limited, however, as was the range of our manuring resources, our knowledge of the soils we cultivated was still more contracted. No idea whatever was entertained of their chemical composition. A brief inquiry into their physical condition was all the investigation bestowed upon them.

A new light has recently dawned upon us, and it becomes us peculiarly as the cultivators of products unknown to other portions of civilization, to embrace and improve it to the highest possible degree. This light is the thorough application of chemistry to agriculture. The cultivators of most other products, have

for their guides the experience of ages and of the whole extent of civilization.—We stand, as agriculturists, isolated from the mass of mankind; their practice is to us a mystery, their experience to us useless. Let us hail then, as the opening of a new era in our agriculture, the scientific discoveries which enable us to apply to practical farming the mysteries of the chemical laboratory.

The doctrine of the necessity of furnishing to plants, either as natural constituents of the soil in which they are required to grow, or in the form of manure, all the components, both organic and inorganic of which they are constituted and which are necessary to their healthful existence, was first distinctly announced by Liebig; the publication of whose book forms an interesting epoch in the history of practical agriculture. But, while announcing the important fact, he seems to have regarded it rather as an axiom than as a new truth, whose importance was to have been enforced upon the attention of agriculturists. Hence, most readers of his works are conscious of no operation of husbandry so important as is the collection and supply of nitrogen to plants. Indeed the philosopher seems to snuff ammonia in every breeze. All the pleasing impressions which others derive from the sight of a herd of cattle going to market, are lost to his imagination. He sees nothing but a mass of nitrogen unfairly abstracted from his native soil; and when man has finished his works and given up the ghost, his only concern is, that the nitrogen of his composition is laid down too low to be made available to vegetation.

But let us do justice to Liebig. He is not onesided in his views—he dwells particularly upon one subject, but his love of theory does not lead him to strain every point to support his views. Another class of philosophers have ridden a hobby which they call *geine*, to which they attribute all the virtues of manures. It would be best, before giving into the *modus operandi* of manures, to inquire first into the whole condition of the products of the soil; let us know first what they are, and we shall be unfortunate indeed if we do not find out what is good for them.

It is one of the blessings with which our lot is tempered, that all genuine work, all honest labor is fruitful;—so have we been benefitted by every class of philosophers who have applied their industry to the consideration of agriculture. We are still hampered in our researches after truth, by the obtrusion of their fanciful theories; but a mass of light has been shed on the subject from which we are confident of deriving vast benefit.

All plants, we may say all vegetable products, are composed of carbon, hydrogen and oxygen—some have in addition a supply of nitrogen. These four elementary bodies are known in chemical language as the organic constituents of plants. The soil contains much carbonaceous matter; the atmosphere that we breathe, is composed of oxygen and nitrogen in mechanical union, and water,

of oxygen and hydrogen in chemical union. The sources of these organic constituents, it will be obvious are inexhaustible. But there is another portion of vegetables which has heretofore been overlooked; it is the incombustible or inorganic structure; that which after combustion remains in the form of ashes, and to which the general and unsatisfactory name of salts is applied. Now in our system of making manures, we have regard chiefly to the collection of organic matter, and we are surprised and disappointed when the application of this matter fails to produce the desired effect.—We shall try to show that the cause of this failure is to be attributed to our neglect in providing for the inorganic constituents of the plants we cultivate.

It is a rule which cannot now be disputed, that *wherever the analysis of a vegetable yields as a constant quantity an inorganic body is absolutely necessary to the healthful condition of the plant*; and it will follow as a necessary consequence of this rule, that *wherever the soil on which it is attempted to cultivate a plant shall be destitute of any one of its inorganic constituents, it will be vain to try to grow the plant upon it*. If the material do exist, but in very minute quantity, the crop will be correspondingly short and sickly.

Regarding this rule as an axiom in enlightened agriculture, we shall draw a few practical results therefrom, in relation to our own pursuits.

The first step necessary towards productive agriculture, and which falls within the province of our agricultural societies, is to have accurate analyses made, not only of the crops we cultivate, but of the soils on which we raise them, and of the manures which we use in their cultivation.

Our own society has the honor of having made one of the first moves in this enterprise, and has furnished an analysis of her principal products. As cotton is our staple, we have devoted this report exclusively to the consideration of MANURES FOR COTTON. In the analysis of this product, including the wool and the seed, we find the following inorganic constituents:

Carbonate of potash, with traces of soda.
Phosphate of lime, with traces of magnesia.
Carbonate of lime.
Carbonate of magnesia.
Silica.
Alumina.
Sulphate of potassa.
Chloride of potassium.
Chloride of magnesium.
Sulphate of lime.
Phosphate of potassa.
Oxide of iron and manganese.

Or by reducing these compounds to simple forms, we find in the indestructible portion of cotton, potash, lime, magnesia, silica, alumina, sulphur, phosphorus, chlorine, iron and manganese.—This is the general result of the analysis made for this society by Prof. Shepard. As the same general result was produced by Dr. Ure's analysis, we have reason to believe that the before named ingredients are all necessary to the perfect develop-

ment of cotton. Let us now examine the material or soil upon which, and the tools or manures with which we are to operate.

The analysis of our soils is yet to be made. The agricultural society of St. John's Colleton enjoys the honor of having taken the lead of her sister societies in this enterprise. She has furnished an analysis of six specimens of soil taken from a cotton plantation on Edisto Island, of which the following is the general result:

Silica, alumina, peroxide of iron, carbonate of lime, and phosphate of lime.

Of the nine inorganic constituents of cotton, therefore, it would appear that the soil of Edisto Island is deficient in four, viz: potash, magnesia, sulphur and chlorine.

It is to be observed, however, respecting this analysis, that it was made previous to the publication of Liebig's agricultural chemistry, and before the important doctrine laid down in this report became even partially recognized. It was made, too, at a time when the attention of our planters was just beginning to be directed to the use of lime, and the respectable chemist by whom the examination made, aimed rather to establish the amount of lime existing in the soil, than to demonstrate rigorously all the material, or as they were then considered, immaterial parts of which it was composed.

Among the soils sent for analysis, was a specimen of marsh mud, that agent which has so signally contributed to renovate the soils of the islands on our coast. Its component parts appear to be, silica, hornblend, feldspar, alumina, iron, lime phosphorus. The hornblend and feldspar of this mud furnish potash, lime, soda, magnesia, manganese and fluorine; so that with the aid of this manure, the soil is furnished with every constituent of cotton, except chlorine and sulphur.—It is difficult, however, to conceive how either of these elements can be absent from a mud which is twice daily, flowed with sea-water.* It is rather to be supposed that they are not enumerated as being too obvious to require special notice.

Having now ascertained the general composition of our cotton and the soil upon which we raise it, let us now inquire what are the ingredients wherewith we propose to amend our soils so as to improve their productiveness.

The cow-pen and the stable have hitherto furnished all our manures. The droppings of our cattle and horses mixed up with the leaves of trees, form our composts. Of these, the product of the stable is generally found to be beneficial, while that of the cow pen is often of

so little value as to discourage the planter in his efforts to obtain it.

One of the most successful planters in this society, has declared that for many years past he has ceased to perceive any improvement in his crops from the use of cow pen manures. The stalks have indeed increased to a large size, but they either produce little fruit or fail to mature a good crop. It is obvious from this result that there can be no want of nitrogenized matter in the manure, or it would not promote rank vegetation. The defect must be in its inorganic constituents. And we may, by comparing the analysis of cotton and of our manures, find where in the deficiency exists. Let it be remembered, however, that we are hampered in our reasonings by the want of full information, which it is the province of the chemist alone to give.

Dr. Ure gives the following as the result of his analysis of cow dung: lime, phosphate of lime, magnesia, iron, alumina, silica, muriate and sulphate of potash—in other words, all the constituents of cotton. It is to be remarked, however, that, though all the ingredients are there, yet some exist in infinitesimal quantities. Thus, all the chlorine, sulphur and potash in 3480 lbs., amount altogether to but 19 ounces; while the amount of potash alone in a thousand pounds of cotton, in the seed, is equivalent to five pounds. Now a good crop of cotton in the limits of this society not unfrequently yields a thousands pounds in the seed, or five pounds of potash on two acres of land. Now let us suppose a liberal supply of compost bestowed upon two acres; if we say a hundred loads to the two acres, we shall far exceed the average amount of manuring. Another liberal allowance would be, the supposition of the presence of the equivalent of three bushels of thoroughly dried cow-dung in each load of compost; and the measure of our liberality will be filled to overflowing if we suppose each bushel to weigh fifty pounds. Now the 15000 lbs. of cow dung which is thus applied to the two acres, contain but five pounds of sulphur, chlorine and potash together, whereas the cotton to be obtained from the two acres would require five pounds of potash alone.* It is obvious, therefore, that if the soil is wanting in these ingredients, the crop of cotton to be obtained by this manuring must fall far short of an average good crop; and this becomes perceptibly so, when it is recollected that the whole amount of manure is not consumed in a season, but that its effects are continued for several years.

It is but just to observe, however, that

* By referring to the report of Prof. Shepard's analysis, p. 440 of the southern Cabinet, it will be seen, that the writer has entirely overlooked the statement distinctly made by Prof. Shepard, that "the saline matter of the marsh-mud is abundant, and that when treated with pure water, the fluid is found strongly impregnated with all the soluble substances found in sea-water, and in addition with sulphuretted hydrogen."—Editor.

* Since the above was written, we have seen Dr. Dana's statement, that the weight of cow-dung as evacuated, is just 87 pounds. Now if 83 per cent. of this be water, our allowance of 50 lbs. as the weight of the dry dung is indeed an excess of liberality. The true weight of the dry dung is just 23 pounds, and the quantity necessary to equal 15000 pounds would be 6.2 bushels. Compare this with the estimate in the text, and we will see how small a portion of these salts is conveyed to the soil through the medium of cow dung.

the urine of the cow yields, by analysis, a larger proportional quantity of these necessary ingredients, in which the dung is defective. But this advantage is hardly compensated when we reflect that in a thousand parts of this excrement, all the saline ingredients together do not constitute a fiftieth portion.

Chemistry has revealed the composition of the excrements of the cow; a manure which we find decidedly inferior in value to those of the horse. We have not, however, the same accurate analysis of these last to enable us to compare them rigorously. We must use the light we have as far as it goes, and trust to logical deductions for some of the conclusions to which we shall arrive.

And, in the first place, chemists differ very materially in the partial analyses which they have made of horse dung.—Macaire and Marcet found 27 per cent. of inorganic matter or salt in that analyzed by them. Liebig admits that he has never found over 10 per cent., and Dr. Jackson of Boston finds somewhat under 8 per cent. These discrepancies stagger our belief in the results obtained. Suppose, however, the lowest to be the most accurate, we have nearly four times as much inorganic matter in the excrements of a horse, as in those of the cow. It is to be remarked, also, that phosphate of magnesia exists in a notable quantity in the dung of a horse, and is also a conspicuous constituent of cotton. The partial report of Dr. Jackson, however, yields no potash or sulphur whatever. This consideration alone indicates to us to consider the analysis incomplete, and compels us, in the absence of a rigorous analysis, to resort to the indications afforded by a logical investigation.

The cattle whose excrements have been submitted to the test of analysis, are better treated in every respect than those from which we derive our manures. It is a common sense principle, and a rule of practical agriculture is based upon it in Europe, that the excrement of an animal shall bear a fair proportion to the food he eats. Thus, in the neighborhood of Hildesheim in Germany, the farmers pay a higher price for the excrements of protestants than for those of catholics, as those of the latter are impoverished by the numerous fasts enjoined by the church of Rome. The same must be true also of the lower animals. In Europe, when cattle constitute an important item in the farmer's wealth, they are fed with the most nutritious food which they are capable of digesting, and their excrements must partake of the nature of their food. The clover and turnips which the happy cattle of that country consume, are rich in the most valuable inorganic ingredients, and hold, in large quantities, potash, magnesia, sulphur and phosphorus. And yet, with all this advantage in point of food, their excrements are inferior in value to those of the horse. Far greater then must be the difference here, where the cow is left to her ingenuity to draw her nourishment from the soil. The grasses abounding in phosphates are not found with us; and it is more than pro-

bable that the small quantity of earthy phosphate they do contain, are all required to aid in the formation of the bones of the animals, leaving a very minute portion to pass out in the excretions.

The horse, on the contrary, is as well fed here as in any part of Europe; perhaps (for we have not yet learned the economy of farming,) he is better fed.—We have, therefore, a right to expect to find in his excrements the constituents of the maize he eats, viz: potash, lime, phosphorus, magnesia and sulphur; and the quantity of sulphur will be sensibly increased when he is fed on peas. Moreover his urine yields nearly five per cent. of saline ingredients, while that of the cow falls short of two.

We can thus by investigating the constitution of the food which the two animals eat, dispense in a great measure with any particular analysis of their excrements, and safely come to the following conclusion: that the inorganic constituents of the excrements of a horse, are more than double, in quantity, those of the cow; and that while those of the latter consists chiefly in silicates, those of the former abound in the phosphates of lime and magnesia; two of the most important constituents of our cotton.

We would therefore suggest the propriety of improving the quality of our cow pen composts by the admixture of certain matters of known utility, and either cheap, if purchased with money, or easily accessible to every cotton planter.

And, in the first place, we would recommend the addition of a bushel of gypsum for every acre which it is intended to cover with the compost.

The advantage of this mixture is a double one. In the first place we add to the manure both lime and sulphuric acids; substances which perform important functions, not only in the growth of cotton, but of every crop we cultivate; and in the second place, we prevent the evaporation of ammoniacal gases, which have always a tendency to escape during the process of decomposition.

A strong prejudice prevails in many parts of South Carolina, against the use of gypsum; and this prejudice is strengthened by the consideration that it was imported largely for the sake of its supposed fertilizing properties, and failed. But it should be remembered that at that time the use of any manure was a blind practice, equivalent to quackery; that from the use of gypsum unaided by other agents, all virtues were expected; that it was esteemed a panacea for all agricultural evils, and that disappointment was the natural consequence of such unreasonable practices and hopes. And yet with all the odium attached to its memory, we have heard of some singularly favorable results attending its use. Among others, we have heard that the late Thos. Palmer, Esq., from his plantation in St. Stephens parish, the product of which was 60 lbs. of cotton per acre, one year with the aid of gypsum, obtained an average of 120 lbs. If subsequent experiments resulted in failures, this may be accounted for in a variety of

ways: the gypsum may, as lime will do, have exhausted the soil; this is no mystery in countries where lime is used; the seasons may have been unpropitious.—And it may be true, that in the absence of any marked beneficial result, our planters may have been discouraged by apparent failures, and seized gladly this pretext for saving their money, and avoiding a labor to which they were unaccustomed. Of all men in the world, agriculturists are the most unwilling to follow improvement in their profession; and the readiest to discover the utility of those suggested. Our planters long since knew that lime was used in their very neighborhood with favorable results, but it required the energy and fire of a Ruffin to make the adoption of its use general.

In addition to the gypsum, we would recommend that all the spare cotton seed should be cast upon the compost heap.—It is needless to dwell before this society upon the incalculable value of this manure. We would only suggest that the cow-pen would be materially improved, while the cotton seed would be permitted to be spread profitably, though in small quantities, upon a much greater surface than they could be if applied in the usual way.

Lastly, we would perfect the compost by the addition of ashes. There is no manure, cotton seed perhaps excepted, which applied singly to land, produces such striking results. The ashes of the oak, those which are most accessible to us, contain all the inorganic constituents of cotton, and are particularly rich in lime, potash, sulphuric acid, chlorine and phosphoric acid, while they contain all the other constituents as to preclude the idea of deficiency in any.

It may be objected to the addition of ashes to the compost heap, that the mixture will hasten the evolution of ammonia, and thus rob the manure of its nitrogen. If, however, gypsum be applied previously or in combination with the ashes, this objection will in a great measure be removed; since the ammonia has an affinity for the sulphuric acid of the gypsum, with which it forms a solid body, the sulphate of ammonia. But even were this not the case, observation has taught that it is almost impossible to expel all the nitrogen; that which remains will unite with the potash; in the great laboratory of nature, fresh supplies will be elicited from the atmosphere, and the result will be the formation of the nitrate of potash or common salt petre of commerce; an agricultural agent at least as valuable as any preparation of ammonia can possibly be.

We close our report with the relation of a few facts coming under our observation, corroboratory of the remarks we have here offered.

On the 22nd day of August last, the committee on manures visited Fair Spring, the plantation of Mr. Robert Mazyck, to witness the result of his experiments with green sand. The marl, of which this is the only locality hitherto discovered in the state, is found in a ravine on the eastern side of Begin Swamp;

it is of a lively green color, so soft as to be easily turned out with a spade, it is full of fossils, indicating the presence of lime in its various modes of existence, and is said to be rich in potash. It is to be regretted that Mr. Mazyck did not accurately observe the quantity applied to his land; and it is rather too early in the season for us to be furnished with the result of his experiment. At that late period of the summer, however, a practical eye can judge with tolerable accuracy, what the result will be. It required but a glance to convince us that the cotton manured with the green sand, was worth three fold the best portion of his crop not so manured. We can give no better idea of its appearance than by comparing it to a pyramid of luxuriant vegetation, rising up so abruptly from out of the rest of the cotton, as to be at a glance obvious to the most careless observer: and the quantity and maturity of the fruit corresponded with the luxuriance of the plant.

Less striking in its appearance, on the same day, was a field at Somerton, manured with twenty loads of cow-pen compost, and twenty bushels of ashes per acre. But even this small quantity of ashes caused such a difference in the growth and maturity of cotton, as to be easily distinguished from that which had none. A part of the result of the experiment at Somerton is known, and corroborates our opinion, that ashes should be mingled with the compost. At the second picking of cotton, before the middle of September, four hundred pounds per acre of cotton in the seed, were harvested from that portion which had ashes. It is but just, however, to observe that in this case the ashes formed no portion of the compost; they were spread upon the list, while the compost were placed under.

One of the committee has recently seen a crop of cotton in St. Andrew's parish, which he thinks is estimated at too low a rate, at a thousand pounds of seed-cotton per acre. This result was effected by using the fine particles of the compost at the bottom of the manure heaps. In this case the saline particles of the compost heap were concentrated at the bottom; for they always descend; being carried down partly in a state of solution, and partly by the mechanical action of rains. The result of the three instances here mentioned, are with us conclusive.

That the action of manures is directly in proportion to the amount and quality of their inorganic constituents, and that to the collection of these, the planter should mainly direct his attention.

Offering the accompanying resolutions as necessary to carry into operation the principles of this report, we shall no longer trespass upon the patience of the society.

In behalf of the committee,
FREDK. A. PORCHER.

Cure for Glanders.

MESSRS. EDITORS:—I have heard it said all my life that glanders in horses were

incurable. But this I have proved to my entire satisfaction to be a mistake. Some time in September, 1850, I met with an opportunity of trading for what I thought was a good brood mare—at the time she was running copiously at one nostril, which was represented to me to be distemper. I was suspicious of its being glanders, but concluded to risk it. It afterwards proved to be glanders. Now for the remedy: In the first place I bled copiously; I then put in a rowel or seaton of polk root, between the jaws and in the breast; I then procured one gallon of fresh tar; I next fixed a small mop on a stick long enough to insert it as high up as the eye. I inserted the tar into the nostril in this way twice a day until I had made a complete cure. I had never heard of the remedy before—but supposed there are a great many little fibres in the head of the animal that, from some cause or other, discharged the matter, and I supposed the tar would heal them up.—Great care should be taken to keep the blood in a good state, to prevent it from turning to farcy about the time the running at the nose ceases, as I believe glanders will produce farcy, and farcy produce glanders.

If you think this will be of advantage to any of your readers, you can give it a place; and perhaps you, or some of the subscribers to your valuable paper, can give some more information on this subject—or why it was the tar effected a cure; if so, let it come, for we live over here in a dark corner, and need all the information we can get. About ten of us take the Farmer and Planter, and think we will forward you another club soon. Respectfully, yours,

BASON HOLLOW.

Cobb's Mills, Ala., May 15, 1851.

Review of the May Number.

WE are rejoiced to witness manifest signs of improvement in your journal—the last numbers teem with good things, and we begin to indulge a hope, that our planters are waking up to the importance of working the mind, as well as the soil. Intelligence is what we want—if the Agricultural class were educated for their profession, they would find it not only their interest, but as much a labor of love, to study Agricultural works, as the lawyer, doctor, or preacher does.

"Pencilings by a Planter."—Very good—we don't care how many rainy days come, if they produce like fruits. We must through the press endeavor to elevate our standard of knowledge—it is al

important for the farmer to know something more than to plow and to hoe, if you wish him to improve.

"Corn Culture Again."—A fruitful theme—reminds us of our old copy at school—many men of many minds, &c. Mr. Crawford has given us a capital article—we beg "Root Cutter" to put a pumpkin in the other end of his bag.

"Cotton Planting and Cultivation."—Another good number from the pen of Dr. Phillips.

"Transplanting Cotton."—It can be done, when the seasons are fine. We have tried transplanting corn and cotton both, as an experiment, and are satisfied that it could be done at times with economy and profit.

"Theories of Agriculture."—How many humbugs have been packed off upon the world in the shape of these theories of enthusiasts—we are glad to see the mists are daily being cleared away, by the investigations of the true practical men of science, but we have despaired of ever having the lime question settled. While Dr. Morton asserts that it "encourages the decomposition of the structure of animal and vegetable substances," Dr. Davy asserts that with the exception of the cuticle, nails and hair, lime exerts no destructive power, but a particularly well marked antiseptic one, and on vegetable substances it absolutely arrests all fermentation. We suspect that we shall yet have to fall back upon old Dr. Cooper's doctrine, of lime as a mineral solvent—a sort of menstruum to dissolve and hold in solution the food of plants.

"The Cherokee Country Again."—"The galled jade may wince, my withers are unwrung." These Cherokee gentlemen kick confoundedly when they are spurred. We are the more convinced that Mr. Whitten is right, since J. C. D. has spoken. He admits that they do not grow the finest staples, or the greatest abundance per acre, but talks of 1000 to 1500 per acre as a pretty fair business. There are many farms in Pickens and Greenville that will do as well, and yet the farmers there, do not pretend to think *theirs* is a cotton region. Wheat—well we were at a fair at Stone Mountain and saw no very fine specimens of wheat, upon remarking the mixed character, we were told by one of the best planters in the Cherokee country, that all their wheat was mixed. Does not the rust strike all the late varieties? answer us that? J. C. D. admits another "neither"—it is not such a wheat country as the North-Western States.—

Grasses, "it has been said by persons from Tennessee that they thought the grasses and clover would thrive and do finely here," and there has been several bushels (!) of grass and clover seed sold to Cherokee, during last spring and fall at considerable cost. As much noise was made about the prairie lands of the West some years ago, and what is their reputation now? It has been the rage, for some time to extol this Cherokee country—if it deserves it, neither "Mr. Whitten or Mr. Broomsedge" can retard its progress or lessen its products. But gentlemen we have a right to speak our opinions—controvert them if you can, but keep your temper. Give us some evidence of these "highly calcarous lands." According to analysis, one of the best soils in Cass county gave:

Moisture.....	135.6
Vegetable matter.....	73.9
White silicious sand.....	730.0
Alumina and prot. iron.....	94.8
Carb. lime.....	1.2
Magnesia.....	3
Saline substances.....	2.1
Gypsum and lime with organic acid.....	2.0
Traces potass. and phos. acid.....	0.0

1000

Deficiencies, lime potass. phos.

"*Agricultural Prospects.*"—Bad—we have bad stands of cotton, and now and then of corn. Wheat injured by the wet winter and the fly—oats cut off by the drought—it is now 29th May—we have had no rain since the 26th April—save one light "season" on the 3d inst.

"*Fruit.*"—Peaches abundant—apples few—blackberries plenty.

"*Meteorology again.*"—Joachim has given us some good suggestions. Come ye weatherwise brethren to our aid.

"*Soap making.*"—Good—there are few things in house-keeping that produce greater botheration, than this self same process. We do know honest women who think the moon has something to do with it—others charge it to the water and others to the wood. What is the reason that water abounding in sulph. magnesia will not make soap—is it the sulphuric acid?

"*Food of Plants Again.*"—Mr. Van Buren has made a strong case of it, certainly, and honestly challenges discussion.

"*Kitchen Garden.*"—We have not a word to say—it is notorious that gardens are neglected when Broomsedge is about. It is our weakness, and we candidly "acknowledge the corn." The only thing we are good at is snaps.

"*Subsoiling.*"—Keep it before the people—there is no one thing in Agricul-

ture against which people set their heads more resolutely, than deep plowing.

"*Wheat Bran as a Manure.*"—It would be wiser policy by far, it strikes us, to feed it to the miserable looking cattle who seek the fence corners in winter for shelter, it would make their manure far more valuable. It is capital food for colts, brood mares, and hogs too. Gentlemen, make your manure out of something that it does not cost so much to manufacture.

Yours truly,
BROOMSEGE.
Big Branch, May, 1851.

KETTLES.—Brass kettles, before using, should be carefully cleansed with salt and vinegar.

Planting Cotton.

MESSRS. EDITORS:—Something has been said, and well said, in your two last numbers, on the mode of planting cotton, which differs very little from my own mode of opening the cotton bed.—I open them after they have been well made, with the foot of a plow stock turned round and tapering, like a boy's top, sharp at the end, without the first particle of iron on it. This shaped instrument enables me to open a very small drill or a large one, as may suit the roughness or the height of the bed; it is quite the article—try it you farmers, and you will have no just cause to complain of your cotton bed being torn down, or of the great expense of it—your little trouble is all. Cover your cotton with blocks or harrows as it may suit your notion. If the beds have been of long standing I would prefer a tolerable wide, fine, iron-toothed harrow for the double purpose of renewing the bed and covering the seed. I have constructed a simple machine that runs by two weights, without any horse, for the purpose of dotting off for cotton or corn, or any thing else; for setting out cabbage it will do the work of ten or twelve hands, and more accurately.

It was my intention to have given you, at the commencement of the Farmer and Planter, a text book (being a practical farmer), but having some reasons to believe that some one or two little petifoggers, who only know the old beaten track to the school-house door, interfered in the matter—if there was to have been any interference I think it should have been by you. I do not profess to be a scientific writer, it is true, but I do profess to be a practical farmer.

In conclusion, allow me to congratulate you on the many able pieces in the Farmer and Planter, and more particularly

on the piece in your April number recommending conversational clubs, as it is the very essence of my desires. I have such strong faith in the doctrine, that I feel like it was some connection to me, or mine.

W. D. A. DEAN.

Laurens, S. C. June, 1851.

Buckwheat.

We were presented last winter a half bushel of Buckwheat by Messrs. Chamberlin & Co., of Rome, Ga., (who keep a better assortment of seeds and agricultural implements than we have seen any where so far in the interior of the South) a part of which we distributed among some of our subscribers on our road home. The following article, taken from the Farmers' Register, may be interesting and of service to such as may desire to cultivate the grain, either for table use or the improvement of land. Buckwheat cakes, though rarely seen at the South, are considered a great luxury when properly made. For renovating exhausted lands it is spoken highly of at the North, but with us we should, without having experimented with it however, estimate it lower than the cow-pea.

"Buckwheat is a grain that will grow on most poor soils. It delights most in dry locations, a soil inclined to gravel or sand. It has many qualities that recommend it highly as an article to be grown for the purpose of filling the soil with vegetable matter, of which it has been much exhausted in the states of which we have spoken.

In the first place, it will grow and produce a handsome layer for the plough, on lands that will produce nothing else. In the second place, we do not find it an exhausting crop. We can raise it many years in succession on our poor lands without any manure, and we very commonly save fifteen or twenty bushels of the grain from an acre. This plant has a very small, fibrous root, and is easily pulled up with the hand. It has also a large branching top that never could get its support from this root. It has, therefore, probably greater facilities for procuring nourishment from the atmosphere, than most plants have.

All theory and all experience unite in showing that this plant takes less from the soil, than any other of the same size. In the next place, it has a rapid growth, six weeks, in Massachusetts, being long enough to bring it in full blossom, when it should be ploughed in. Three crops may therefore be turned under in one season in Virginia, and then it will be early enough—Sept. 1st—to sow down with grass seed.

Another advantage attends the raising this for grain or for green crops; the expense is not great. It usually bears the same price as our best corn, and is worth quite as much for fattening animals, and one bushel of seed is enough for the acre. When it is raised for the purpose of saving the grain, we often sow but half a bushel. The straw is also greedily eaten by the young cattle and by horses—colts may be wintered on it.—

Yet we have known large quantities of this straw to be burned in the field where it was thrashed.

Now with this article—this old, neglected, abandoned, and abused buckwheat—we could soon renovate the once beautiful plains, formed from the washings of the gulf of Mexico, and laying between the Alleghany ridge and the Atlantic ocean. Much of this fine tract has been cropped, time out of mind, while nothing was grown that could make any adequate return for what was abstracted.

The natural advantages of this tract of country are superior, in our humble opinion, to the far-famed west. And though the soil has been mismanaged and abused, a few years of correct husbandry would again restore it to its pristine value and importance. No critical niceties need to be observed, no nicer labors than the blacks are capable of performing, are required to bring these feasible soils again to fertility. And when they are brought to that state, there is no difficulty in keeping them there.

None of the various grasses are great exhausters of the soil, and the grasses must form one of the series of the rotation of crops. When lands are kept half the time in grass, the roots fill the soil with vegetable matter that turns to manure directly on being turned by the plough, and, by means of raising more grass, more stock may be kept, and that increases the quantity of animal manures.

The policy of raising so many acres of corn on reduced land, must be abandoned. When more buckwheat can be raised on the acre than is obtained of Indian corn, it should be substituted for corn in a great measure, for it requires not a sixth part of the expense to produce it—and when buckwheat is raised for its grain, if proper care be taken to sow something with it that may be turned in for a green crop in June, the land will prove more productive, year after year.

On the wet and clayey lands of that district of country, buckwheat may not be sown. Such lands may be treated as we treat our grass lands, of that character, at the north. They may be turned over in autumn, and seeded down again directly to grass."

Agricultural Improvement.

It is cheering to observe the changes that are taking place in the minds of those whose occupation is the cultivation of the soil upon the subject of manures. The sun of hope brightens, and the clouds begin to break away. The time has passed by when he who had the hardihood to defy public opinion by applying manures to his land was considered a monomaniac, or, by the more charitable, a simpleton. The change in public sentiment is obvious, and will be followed more and more every year by a corresponding change in practice. That such is the case appears from almost every newspaper we take up. The columns of every journal, that comes forth from the press, are graced with articles designed to show the dignity of the pursuit of agriculture, the practicability and ne-

cessity of the application of manures to our lands. Nor is this all a matter merely existing on paper. There is a cause for these things.—Journals have a double character. Sometimes they originate and give tone to public sentiment, and sometimes they receive and appropriate it. They imbibe, then radiate the light. The equilibrium cannot long be unsettled. The press, as a mirror, reflects the agricultural as well as the moral, religious and literary condition of the people. Again—if we take our seat as a quiet listener upon the piazzas of public houses where planters congregate during the session of the courts, or join the throng that daily passes along our rail roads, or up and down our navigable rivers, we observe the change. In times past we heard in these places of little else than the cotton bags—the number of cotton bales. They monopolized all the thoughts, all the conversation. They were the golden calf, and men built their altars before it, rose early in the morning and toiled late to make offerings to this idol.—They continued to make sacrifices to this God, until their lands became wasted, their substance gone and themselves without a home. It is yet too much the case, but it is not now wholly so.—Men now sometimes discourse upon the subject of agriculture rationally. They discuss the various modes of improvement in their lands, and the best mode of preserving what is left of them. The number of bags of cotton to the hand, is not the only measure of merit in a planter; waste and improvements are elements that enter the computation. With judicious men a balance sheet is struck annually, and the wear and tear of capital is made a deduction from the sum of the profits, too often, to be sure, to their entire extinction. It is discovered there is no increasing or maintaining the produce of land where it now is, without supplying from some source those fertilizing materials which every crop, and more than all every washing rain, bears away. Some have found by experiment that it is within their power to manure their whole crop—albeit their plantation is large and their acres many. Others manure in part. Others still knowing the right yet the wrong pursue, and seem determined to mutilate, desolate, and desecrate a heritage that was given to man for a better purpose. The number of these is, we are confident from observation, gradually lessening. The conclusion forces itself upon our mind, that men are becoming more contented and better satisfied with home, and more disposed to bear the ills they have than fly to others they know not of. It is common to hear it said by those, that sacrificed the land of their fathers, after ten years search for the richer lands of the west, they left a better country behind with the comforts of a refined society, in exchange for the inconveniences of an inhospitable, wild, new country. These facts and truths are getting to be better known and more seriously considered than formerly. As a matter of course the ways and means of preservation and improvement, begin to excite attention. The majority, however, are not yet ready to advance rapidly. The great mass is not yet sufficiently impressed with the magnitude of the

subject to enlist actively in the cause of improvement. The minds are only beginning to perceive that something may be done, and even profitably done. Planters of large means have to take the lead in the march. They have to demonstrate that one dollar may be so expended in improvements that two may with a moral certainty be got back, and when farmers are convinced beyond doubt of this, like other classes, they will suit their conduct to their interest.—Men of smaller estates are prone to look upon improvement as suited only to those of large means and altogether out of their reach, but this is wholly erroneous. It is as fully within the power of him who works a few hands, or lives by the sweat of his own brow, to drain and hill-side ditch his lands, to plow deep and manure, as of him who directs a large force. He may profit as much by reading, reflection, observation, and experiment as the millionaire. Agricultural periodicals are as well adapted to his wants. There is no royal road to success in husbandry. The avenues to intelligence are wide open to all. The practice of economy in the use of manures must be exercised by an intelligent industry. The richest lands, as well as those of less fertility, will in time become unproductive under a system of unvaried cropping.—Not a month since an extensive planter in one of the oldest and best counties in the State of Alabama, said to us, "our lands are worn out in the culture of cotton, and we shall be driven to a regular system of manuring or abandon its culture. Of this the most of us are convinced. But corn we can make forever without trouble. Our lands, many of them at least, are inexhaustible for the production of corn." We asked why in the lapse of time they might not be worn out in this crop as in the cotton, but in answer received only the affirmation that they were inexhaustible and would not wear out.—How by any scale of reason, or the lessons which every day's experience teaches us, we can take such an answer as satisfactory, or look upon the opinion as worthy of respect, we are unable to perceive. It is the ignis fatuus that has tolled thousands into the mire of inextricable poverty. It must not be heeded. Plants will not grow unless they are fed. To be sure nature's storehouse of food for plants is large, and it is impossible to annihilate a single elementary particle, yet that apartment which any individual claims as his own, may, by want of care, be made empty and barren, no matter how rich. The same is true of whole regions of country, if there are not examples enough in the United States, there are abroad. Sicily was once prolific in her grains and other provisions, but retribution has overtaken her for her improvidence, and she is now the very opposite. It is, then, a matter of the highest importance for planters to institute a rigid system, first, of saving, and afterwards of manufacturing fertilizers. Waste in these is the ruinous consequence of carelessness in part, and in part of a want of knowledge of their value. An instance has just come under our view, in which wood-ashes seem to have been regarded as a burden if not a nuisance. Two large sinks

in the ground were found filled with these ashes, where they had evidently been deposited, years ago, by a former occupant, as a convenient place of getting rid of them. There was most assuredly need enough of them on the land, and the proprietor could not have been aware that they are almost unequalled in the whole catalogue of stimulating manures. The contents of the sinks were removed, and applied to the corn in the field, where they manifestly have been beneficial to the soil as a stimulant, and also to the crop, during the late drought, by attracting moisture from the atmosphere in consequence of the alkaline properties they contain. This case is perhaps rather grosser than usual, but not a solitary one, probably, in this neighborhood. How many are there in every district in this State, and in every county in the cotton growing region, guilty of the same mal-practice? Let every tiller of the soil inspect and examine his premises, to see how many deposits of valuable fertilizers there are, that might easily be converted into gold, how many drains there are that carry away his capital at the fall of every shower of rain. Let him with the farmer's instrument, the nose, as our correspondent J. P. B. has called it, visit his stables and note whether a sprinkling of gypsum or of charecoal, or a coat of clay, tanbark, saw-dust, or some fixer of the volatile and liquid parts is not needed. Let him observe how the sun, the rain and the winds affect the contents of the stock yard, and whether pine straw or leaves (the straw is better than most leaves as it contains more potash) is not wanting here.—And in his review, let him ask himself the question whether or not he has pressed into his service that great renovator, of Southern worn-out lands, the *Cow-pea*. These points being attended to and found all right, he may confidently expect prosperity in the pursuit of agriculture.

From the Laurensville Herald.

Mode of Cotton Planting.

DEAR SIR:—I cannot say positively, but I think it was in your paper, I saw some fault-finding about preparing land for cotton, with some bull-tongue mode recommended. If I am or am not a planter, I can at least tell you how some folks prepare land, and those folks who do make from 7 to 10 bales per hand, and from 1000 to 2000 lbs. per acre:

Some of these folks use shovel plows to lay off the rows, others use the turning plow. First—fix in your mind the distance to plant, then measure and mark stakes; lay off your rows, if level land, as straight as a bee-line; to this throw two furrows with a two-horse plow—No. 15, Ruggles & Mason's, for sale by A. B. Allen & Co., N. Y., they are large enough. Let this be done, say 15th March or earlier, but endeavour to avoid the wet spell in that month, yet to have some rain to settle or consolidate the three furrows.—And instead of leaving earth not broken under these furrows, be sure to have every particle broken up six inches deep.—If you desire to plant, say 5th of April, put your two-horse plows to work, three or four days before that date, and break

out the remainder. A four foot row should take six furrows, besides the first, this gives not seven inches to the furrow slice. I am particular in stating this, to show how important is deep plowing and a high ridge. When this is done run an iron-tooth harrow over the ridge—I would repeat this but for a game hand and the trouble of writing—immediately open with a stick of wood fastened to clip of shovel plow, three feet long and sharpened at the lower edge, that the furrow may be only from $\frac{1}{2}$ to 1 inch deep, and narrow at bottom, so as to get the seed in a very straight line, no deep furrow, and sow only one bushel of seed per acre, if you have millions to waste.—Cover with a block of wood 30 inches long, from 14 to 16 inches wide and 4 thick. The bottom is hollowed out in front 1 inch deep, running out at each end to nothing, and also the back—there is 6 inches of each end and 6 inches of back under the surface flat as at first.—This hollow serves to collect light loose earth into the furrow, and the level part behind presses the earth—your bed looks like it were ironed. I saw cotton up two days since, upon which not a drop of rain had fallen since it was planted, and no rain for a week before the ridges were made. I have heard tell of, and seen some ways of planting, and if I dared to say it, I would—I have practised a few on 'em—with this plan I can show the prettiest planting, best stands, and the easiest scraping that was ever seen or shown.

I remark on the article, alone from memory, and, in truth, from a mere reading, and am not now certain where I saw the article.

I would like to know, why lap furrows upon unbroken earth? Why open the furrows with a bull-tongue for planting seed? I would prefer a furrow half an inch deep, and then cover with a roller, merely to press seed into the earth and earth to seed. It will take two hands to drop to each opener, and one hand to roll seed to ten hands, or about that.—Thus, to plant 20 acres—A takes two harrows, two openers, four droppers and two coverers, with one, a half day, to roll seed—say, 10 $\frac{1}{2}$ days work, or one day per acre. There are many who plant ten acres with three hands, using from 30 to 50 bushels of seed, and rough work. I think that seed ought to be worth 10cts per bushel for manure. Let us now settle up. The mode I recommend requires two days work more, per acre, which, at 30cts per day, makes a loss of 60cts. I save three bushels of seed—gain 30cts. But admit labor to be worth 50cts, and I lose 70cts in work. When you scrape, a hoe hand can do double the work. If by the "rough-and-tumble" mode he can scrape one acre; by this plan he can scrape two acres; and when labor is worth 75cts to \$1.00—here I have the whole loss made up. But this is not all, the first plowing gives the same gain, it can be done so well that there is a gain, and the hoes that follow gain again.—Try it, who will, and I will refund all loss, if he does not persevere.

Should a good opener be wanted, as a specimen, I will furnish it this winter, or any time, at four dollars; and a coverer, properly made, at three dollars. Nothing is made by the workman, and only a pair is offered, that your subscribers may ride into the village and take pattern.—Were I as wealthy as Wm. Aikin, I would send to every Court House in the state an opener, a coverer and a Mississippi scraper. By taking thirty they could be made for ten dollars the set, and would benefit South Carolina \$5000 a year. What is the use of being rich if no one enjoys it but self? Why, sir, as poor as I am, I love to see others enjoy, not only my poverty, but the result of my labor.

Now, sir, if any man upon earth can point out a better mode of planting cotton, I want to see it. This mode can be practised—I know it, "and that is sufficient," as the little boy said when his mother asked him where he was bit.—And if any one doubts my knowledge, all he has to do is to drop in at—, and he shall see two, aye, three fields prepared and planted exactly as I say. May this do thee good, dear friend, is the wish of your
Colo.

The Practical Use of Leaves.

THERE are two facts in the function of the leaf which are worth consideration on account of their practical bearings.—The food of plants is, for the most part, taken in solution through the roots. Various minerals—silica, lime, alumina, magnesia, potash,—are passed into the tree in a dissolved state. The sap passes to the leaf, the superfluous water is given off, but not the substances which are held in solution. These, in part, are distributed through the plant, and, in part, remain a deposit in the cells of the leaf. Gradually the leaf chokes up, its functions are impeded, and finally entirely stopped. When the leaf drops it contains a large per cent. of mineral matter.

An autumnal or old leaf yields, upon analysis, a very much larger proportion of earthly matter than a vernal leaf, which being yet young, has not received within its cells any considerable deposit. It will be found, also, that the leaves contain a very much larger per cent. of mineral matter than the wood of the trunk. The dried leaves of the elm contain eleven per cent of ashes, (earthy matter,) while the wood contains less than two per cent.; the leaves of the willow eighteen times as much as the wood; the leaves of beech an excess over the wood a small fraction less; the leaves of European oak, nineteen times as much as the wood; and those of the pitch pine, twelve times as much as the wood.

It is very plain, from these facts, that, in forests, the mineral ingredients of the soil perform a sort of circulation; entering the root, they are deposited in the leaf then, with its fall to the earth, and by its decay, they are restored to the soil, again to travel the circuit. Forest soils, therefore, instead of being impoverished by the growth of trees, receive

back annually the greatest proportion of those mineral elements necessary to the tree, and besides, much organized matter received into the plant from the atmosphere; soils, therefore, are gaining instead of losing. If the owners of parks or groves, for the sake of neatness, or to obtain leaves for other purposes, gather the autumnal harvest of leaves, they will in time take away great quantities of mineral matter, by which the soil ultimately will be impoverished, unless it is restored by manures.

Leaf manure has always been held in high estimation by gardeners. But many regard it as a purely vegetable substance; whereas it is the best mineral manure that can be applied to the soil. What are called vegetable loams, (not peat soils, made up principally of decomposed roots,) contain large quantities of earthy matter, being mineral-vegetable rather than vegetable soils. Every gardener should know that the best manure for any plant is the decomposed leaves and substances of its own species. This fact will suggest the proper course with reference to the leaves, tops, vines, haulm, and other vegetables of the garden.

The other fact connected with the leaf, is its function of exhalation. The great proportion of crude sap, which ascends the trunk, upon reaching the leaf is given forth again to the atmosphere by means of a singularly beautiful economy. The quantity of moisture produced by a plant is hardly dreamed of by those who have not specially informed themselves. The experiments of Hales have often been quoted. A sunflower, three and a half feet high, presenting a surface of 5,616 square inches exposed to the sun, was found to perspire at the rate of twenty to thirty ounces avordupois every twelve hours, or seven times more than a man. A vine, with twelve square feet, exhaled at the rate of five or six ounces a day. A seedling apple tree, with twelve square feet of foliage, lost nine ounces a day.

These are experiments upon very small plants. The vast amount of surface presented by a large tree must give off immense quantities of moisture. The practical bearings of this fact of vegetable exhalation are not a few. Wet forest lands, by being cleared of timber, become dry, and streams fed from such sources become almost extinct as civilization approaches on wild woods. The excessive dampness of crowded gardens is not singular, and still less is it strange that dwellings covered with vines, whose windows are choked with shrubs, and whose roof is overhung with branches of trees, should be intolerably damp, and when the good housewife is scrubbing and scouring, and nevertheless marvelling that her house is so infested with mould, she hardly suspects that her trouble would be more easily removed by the axe or saw than by all her clothes and brushes.

A house should never be surrounded closely with shrubs. A free circulation of air should be maintained all about it,

and shade trees so disposed as to leave large openings for the light and sun to enter. The unusual rains that some seasons produce great dampness in our residences, cannot but be noticed by all, both on account of the effect on the health of the occupants and upon the beauty and good condition of their household substance. Such facts should always be kept in mind, when locating houses, and when planting trees and shrubs about them.—*Rev. Henry Ward Beecher,*

"Southern Lands—Immigration"—"Northern Agency" for the Sale of Lands South.

Messrs Editors:—In inviting your attention and that of my brother farmers to this highly important subject, I offer no apology other than the assurance of a deep interest, which I, in common with others, feel in this subject. I admit that there is a diversity of opinion among the Agriculturists of the South on this subject, but that there should be, to me is a mystery. No subject merits more attention or is more worthy of thorough investigation; and the *present* renders it one to which the agricultural mind should be seriously and diligently directed—it is not the improvement of soils—but the improvement of society—our moral character—it deeply concerns us, but more directly the rising generation. It has been "suggested" to the land-holders of the South, that "Northern Agencies" be established for the sale of "Southern Lands." A suggestion fraught with more evil could not have come from the "North." As usual, it is pregnant with wicked design, therefore it is not surprising that this intimation should come from a Northerner. From the cradle principles of cunning—are instilled—it grows with their growth, and in manhood becomes the principal food of his mind. That the lands of the South are cheap, especially in Virginia, North and South Carolina, and that there are many portions of these States sparsely populated, no intelligent mind will deny—and that our present population is as large as desirable, no one will admit. The establishment of "Northern Agencies" proposes to fill up this vacuum. How? By the introduction of "emigrants from the North," and foreigners. The North has become convinced that if the tide of emigration from the "old world" continues to increase as it has done for the last three years, and being aware of the great extent of pauperism that exists among them, that it will be perfectly impossible for the "free States" to sustain such a vast population. Let us, for instance, look alone at the German emigration to the State of New York. "The German Emigration Society of New York," in its report says that "total emigration from 1847 to 1850, was 179,095. What is this number when compared to that vast multitude that annually arrives at New York, Boston and Philadelphia? Is it unwarrantable to suppose that two thirds of this host of foreigners are paupers. If so, is not the conviction forced upon the North that this great acquisition of pauperism has become, or soon will be, an insupportable burden? Does not the question naturally suggest itself how are we to

get rid of this great pest?—and being noted for artifice, they perceive at a glance that the establishment of "Northern Agencies" for the sale of "Southern Lands," would greatly relieve the "North" of this insupportable burden. Let the "Agencies" be established, and the Northern capitalist, manufacturer, farmer and mechanic, together with the wealthy foreigners will emigrate South to fill up the existing vacuum—and that they would necessarily employ *free labor*, I imagine, no intelligent mind will deny. Where is this *free labor* to come from? Why—as birds of a feather flock together—the paupers of the "Northern States" would immediately *herd to the South*, to join their friends who have emigrated before them. Slave labor would be entirely excluded by them on their farms and in their work shops. But says one—"No accession to our population would be acceptable," unless it be of persons whose characters are respectable, and whose habits are likely to exert a salutary influence upon society. And as the Southern States are capable of sustaining a population infinitely larger than the present, *I for one would be glad to receive them among us.* Here we partly agree—but I would ask how are we to learn the character and habits of an emigrant just from Europe? I presume he must bring a certificate as to character and habits, with him. What are we to do with the Northerner, he being an abolitionist? as the majority, if not all of them are—none being sound—he must bring, also, a scrip or so signed by a host of *his brethren*, and if he will only suppress his sentiments in regard to the delicate subject for a *short time*, he will be gladly received. Know ye not enough of the North already? Friend, have you had a northerner or foreigner as a near neighbor in whose employment a host of "*free laborers*" lived? Try it, and in my opinion your advertisement will soon be seen put up at the "court house and cross roads." Is there a *true hearted Southerner* that wishes such a population sustained on Southern soil? I believe not. Let the "Agencies" be established—the existing vacuum filled and in our public councils—we shall be weighed in the balance and found wanting. We may further affirm that a goodly number of these paupers, and even the wealthy, are profligate and vicious. They too will emigrate South whether they are welcome or no—they are dead to all good principles—regardless as to the feelings or interest of others. Moreover, it is utterly impossible for us to distinguish between this and that class which will exert a salutary influence upon society, before we become intimately acquainted with each individual. If we acknowledge that "money is power," then the profligate and vicious having the equal right with the good to purchase, will surely settle among us; then we must abide the evil having no choice. "Let the agencies be established"—let the northerners and foreigners become densely settled among us, and we will soon learn to our sorrow *that they do not exert a salutary influence upon Southern society.*

Their early education, the principles which they have imbibed and cherished, are diametrically opposed to "Southern institutions." Can

one be found weak enough to suppose for a moment that the mere act of emigrating to the South, and becoming acquainted with "Southern institutions," will bring about a change of principles and opinions that will be favorable to the South. Notwithstanding knowledge and truth are powerful—"convince a man against his will and he is of the same opinion still." Let them become densely populated among us—slave labor discarded—white labor employed by them—thus an element of political power will indeed be concentrated, that will at no distant day exert a tremendously awful influence of evil towards the South and her institutions. At the polls and in our public councils they will overrule us, and we shall not be able to preserve the balance of power.

A VOICE FROM THE SOUTH.

Sussex, Va., June, 1851.

The Gooseberry.

A GOOSEBERRY bush arrives at maturity in six or seven years; and to insure a plentiful crop of fruit the bushes ought to be renovated by pruning out the old wood, at or previous to that time, thus having only young and vigorous branches coming directly from the roots for bearers. The practice of some gardeners in attempting to make trees of bushes by pruning to a single stem ought to be carefully avoided. Plant the White Prolific Gooseberry, avoiding those large varieties which are generally injured more or less by mildew; keep the bushes vigorous by a liberal application of manure to the roots yearly; prevent the grass from growing about them; and prune out the old wood every spring.

By following this system, I raise bushels of this delicious fruit, yearly, yielding a plentiful supply for family use, and several bushels for market. One of my neighbors, three years ago, by following the above plan, sold fifteen bushels from a small garden, and all entirely clear of mildew.—*Germantown Telegraph.*

Fruit Trees.

KEEP the surface of the soil around your fruit trees clean and light. Should any of them become sickly in dry weather, apply a small quantity of compost, and cover the surface with straw. Over this, pour a quantity of soap-suds every week, and the tree will speedily revive and go on as before. The straw keeps the moisture from evaporating, and retains the soil loose and light.

A Cow with Her first Calf.

THERE is so much common sense—so much true philosophy in the following, that we feel it to be our duty to commend it warmly to favor:

"Mr. Russel Woodward, in the Memoirs of the N. Y. Board of Agriculture, says: I have found that young cows, the first year that they give milk, may be made, with careful milking and good keeping, to give milk almost any length of time required. But if they are left to dry up early in the fall, they will be sure to dry up their milk each succeeding year, if they have a calf near the same season

of the year; and nothing but extraordinary keeping will prevent it, and that but for a short time. I have had them dry up their milk in August, and could not by any means make them give milk much beyond that time in any succeeding year.

I have two cows now that were milked the first year they had calves, till near the time of their calving again, and have continued to give milk as late ever since if we milk them."

We have seen the efficacy of the above verified.—*Ed. American Farmer.*

Horse Shoeing.

THERE is so much miserable work done by smiths that every owner of this invaluable animal, the horse, ought to so inform himself in the matter, that he may be able to know by inspecting, when his horse is properly shod. Lameness, temporary and permanent, is frequently the consequence of awkwardness or ignorance on the part of him who sets the shoe. The best remedy or preventive of the evil is, for every man to be able to judge for himself. The shoe will be much more likely to be well put on the foot of a horse whose owner knows when it is well put on, than of him who does not know. If it is not well done, he can direct it properly. A distinguished author of several veterinary works, Mr. Miles, says:—"The shoes of the horse should be of equal thickness throughout, with a flat ground surface, as those with high heels, which asinine smiths make in imitation of their own, are dangerously absurd. The toe, which ought to be raised, is thus lowered, and nature's plan reversed, which elevates the point in order to avoid obstructions. The web should be wide, and of the same width throughout, instead of being pinched in, because the Vulcan operator likes to see the shoe well set off at the heels. This is both unphilosophical and detrimental; it deceives the eye of man, and injures the foot of the horse. The outer edge of the foot rests on the inner edge of the shoe, and the remaining width of the web projects beyond the hoof; so that the master who thinks his horse has a good open foot, only has to be proud of a bad open shoe, which both conceals deformities underneath, and invites with open arms a bad road to come and do its worst. The heels are made bare just where the navicular joint is most exposed; and if that be inflamed, what must the agony be when the unprotected foot treads on a sharp flint? The horse falls suddenly lame, or drops as if he had been shot—phases in much common use to require explanation; and small is the pity the suffering animal meets with from man, who having first destroyed the use of his victim's feet, abuses him because he cannot go; and imputes grogginess to him as a crime, as if he were in liquor like a groom, and not in agony."

Depredations of the Crow.

In a late number of the Farmers' Guide, MR. STEPHENS, in discoursing upon "birds destructive to crops," says as follows:—

The rook or crow, *corvus frugilegus*, has a bad reputation among farmers, and not

without cause; for however sedulously it will follow the plow and harrow, in search of insects, as long as it supports its young, there is no doubt that, after that period, it becomes omnivorous, and will eat anything that comes in its way. It will pick meat clean off the bone—it will eat horse flesh as long as it is fresh—it will eat fish—it will go to the sea-coast in search of shell fish, when food is scarce on the land—it will carry off and eat the stray eggs, it may happen to find at the steading—it will eat the boiled potatoes and oatmeal porridge set down for the poultry—and when a howl of barley broth comes within its reach, it will soon empty it, and the sooner, the thicker the barley is in the broth—it will eat the boiled barley and peas out of the horses' mash-tub—it will take up the young potato sprouts after they have sprouted, for their own sake, being then in a sweet state, and not merely in search of any insects in them, as I have particularly determined—it will pull up the young plants of turnips to get at insects that may happen to be near their roots in the manure, and it is a poor consolation to the farmer to be told that the plants were destroyed that the insects might be captured—it will eat fruit off the trees—it will alight upon laid corn of all kinds, and pick out much more than it can eat—it alights also on stocks of corn and pulls out the ears and eats the grain—it will fly to a great distance to eat the crowberry, *empetrum nigrum*—it will break into the heads of stalks to get at the grain; and in this respect Mr. Waterton is not correct when he says that, "in winter the rook will attack the corn stacks which have lost part of their thatch by a gale of wind." And he takes the occasion to rebuke the farmers of Yorkshire for their being slovenly in delaying to repair the damage done by the wind; whereas, if he had observed more closely and accurately, he would have learnt that the wind first breaks a stack at the eaves, and not at the top, while on the other hand the top is the very place the rook always breaks into, because it knows, probably by the smell, that the heads of sheaves stand accumulated there. These are all facts which I myself observed of the rook, and they are sufficient in number to support the assertion that it is a destructive bird to the farm. At the same time, the rook, in moderate numbers, would do no material injury in the fields, and it is only when it is nourished in excessive numbers, in large protected rookeries, that it does sensible injury.—It is no palliation of their injury that rooks do no greater injury in the neighborhood of large rookeries than elsewhere, for, although they may not feed near their rookeries, they must go to find food somewhere. He who asserts that the rook does no harm to crops, and does good alone by the removal of insects from the soil, must either be a prejudiced or inaccurate observer of its habits.

Our doctrines are—feed the earth and it will feed you—feed the apple tree, and will yield fair fruit.

Enquiry.

IN THE perusal of your paper I notice a great deal which is very valuable, and which deserves the most rigid attention of every tiller of the soil. But there are some things upon which it is lacking. There is a great deal said about the preparation of the soil, manuring, &c., which I admit is the life-blood of a good harvest; but there are other things which are essential to the production of a good yield—the cultivation of the plant. It is true, upon this subject, something has been said, but I think it is very deficient. The various modes of cultivation have led me to make inquiry for information upon this subject. I notice that Root-Cutter argues the plan of cutting the roots and hilling the corn, while Mr. Crawford maintains the reverse, and we are left in the dark with no other light than these two men's practical observations. Now, it is probable, that Root-Cutter could make more by his mode of culture than by any other mode, and also Mr. Crawford from the fact of its being the most familiar with them. Hence the necessity of the establishment of a good system, for if a man has become once habituated to any thing it is hard for him to secede from such custom whether it be good or bad. Mr. Crawford tells us all that is necessary to raise a good crop of corn, is to keep it well stirred—clear from all noxious growth—the earth pulverulent—the surface level, and the roots un-cut. All this is very easily done by any man who uses perseverance. But I would ask the question, will this mode do in all cases, and under all circumstances? Will it do to stir it often in dry weather—and will it do to keep the surface level in low damp bottoms? I think I have seen great injury done to corn and cotton, by working it at the wrong time—by the ground being stirred when it was to dry—and also by its being plowed too late. It is upon this subject I would be pleased to hear more said.—How long should corn and cotton be plowed to be advantageous to it? and whether the process of stirring should be continued when the ground is sufficiently pulverulent—which is always the case when it is stirred immediately after a rain, in which condition it remains until its pores are again closed by another shower.

Yours, &c.,

SYLVESTER.

Spartanburg, S. C., May, 1851.

REMARKS.—Where the soil has been properly prepared by deep plowing, we see no reason whatever for “hilling up corn,” and consider the labor of doing it as worse than lost. It is through the little spongioles situated at the extremities of the roots that the plant receives its food in the main, and these in a deeply plowed soil are located much beyond the earth thrown up to the plant at the usual time of hilling. As the roots penetrate the soil without difficulty, when it has been well plowed, there is no occasion for the mechanical support which the earth drawn up may give the stalk. If the land has not been plowed deep enough to allow the roots to run down, there is perhaps some slight advantage resulting from this operation, in holding the stalk in its vertical position. This however is insignificant and of very little value.

The proper mode to treat the “damp bottoms” is to drain and relieve them of their dampness, but if this is not done, the land should be thrown up in ridges and planted as dry as possible. No planter has a right to expect a good crop, when the roots of the plant have not range enough to find nourishment without running into water or cold damp earth.

There is no doubt with us that frequent stirring of the soil during a drought, is of very great advantage. If there is any fact settled in agriculture this is one. The earth below the surface is of a lower temperature than at the surface, and when opened by the plow the invisible aqueous vapours, present in the atmosphere in the driest times, come in contact with the colder surface exposed by the operation, and are thereby condensed, and moisture or dew is deposited which freshens and revives the plant.

The object of cutting the roots is unintelligible to us, and we regard it as an evil. The good, that is often ascribed to the cutting of the roots, is the effect of stirring the earth. If the question comes to be one of grass or cutting the roots, we choose the lesser evil and plow, doing the work as superficially as possible. The benefit is in spite of the root-cutting, and in consequence of the clean culture. Our experience is in favor of the late culture of corn, provided it is done with the sweep, or some implement which kills the grass, stirs the surface, but *does not reach deep enough to disturb* to any extent the roots. *Late deep plowing* will not answer and ought not to have advocates any-where. Surface culture may be done to advantage even as late as when the tassel is forming.

Importance of Home Duties.

WERE homes more attractive, there would be less temptations to seek amusements abroad; many a wife would see more of her husband, if attention were paid to those apparently small matters. A painful contrast is perhaps brought before his mind. Wheresoever he goes it is all smooth and pleasing before him, even though some carelessness may lurk behind. If he returns to an untidy house, his wife slatternly, his children disorderly, if a gay and thoughtless man, he will leave his own fireside for others more attractive—if a domestic and religious man, he will suffer in silence, and feel all his comfort destroyed; while affections are trifled with in one case, and destroyed in the other. A cheerful countenance, a well-regulated house, and pleasing manners will make the domestic life the happiest in the world. Were early education made more practical, such women would be less rare than they are.

If young ladies would use their accomplishments, their talents, and dress, not for display, but as a means of usefulness, their brothers would be more disposed to stay at home, and much innocent amusement would take the place of idle dissipation. If we felt here, as every where, “thou God seest me”—if we remember the account is to be given to God, and not to men—we should be impressed that our accomplishments are not for display

but as occupation in the absence of that which belongs to the working classes; that a certain appearance in dress and an attention to neatness, is a duty belonging to our station, and that an agreeable manner is a talent given us to improve. The way in which things are done often materially lessens or increases their value. Much unhappiness in families arises from the trifling way women have of passing their time; and of gratifying only their eyes and ears instead of their reason and understanding. The utmost of a woman's character is contained in domestic life—first, by her piety towards God, and next, in the duties of a daughter, a wife, a mother, and a sister.—*Life of the Rev. Robt. Anderson.*

Profits of Fruit.

EXAMPLES almost beyond number may be given, where single trees have yielded from five to ten dollars a year in fruit, and many instances in which twenty or thirty dollars have been obtained. If one tree of the Rhode Island Greening will afford forty bushels of fruit, at twenty-five cents per bushel, which has often occurred, forty such trees on an acre would yield a crop worth four hundred dollars. But taking but one quarter of this amount as a low average for all seasons, and with imperfect cultivation, one hundred dollars would still be equal to the interest on fifteen hundred per acre. Now, this estimate is based upon the price of good winter apples for the past thirty years in our most productive districts, let a similar calculation be made with fruits rarer and a more delicious character. Apricots and the finer varieties of the plum, are often sold for three to six dollars per bushel; the best early peaches from one to three dollars; and pears, from hardy and productive trees, for an equal amount. Of the former kinds, two to five bushels per tree, with good management, is a frequent crop; and on large pear trees five times this quantity. An acquaintance received eight dollars for a crop grown on two fine young cherry trees, and twenty-four dollars from four young peach trees of only six years' growth from the bud. In western New York, single trees of the Doyenne or Virgalieu pear have often afforded a return of twenty dollars or more, after being sent hundreds of miles to market. An acre of such trees, well managed, would far exceed in profit a five hundred acre farm.

But the anxious inquiry is suggested, “will not our markets be surfeited with fruit?” This will depend on the judgment and discretion of cultivators. With the exception of the peaches of Philadelphia, and the strawberries of Cincinnati, a great deficiency is still felt in all our large cities. Of these two fruits, large plantations are rapidly brought into full bearing. The fruit, when ripe, quickly perishes, and cannot be kept a week; yet thousands of acres in peach trees, bending under their heavy crops, are needed for the consumption of the one city, and broad fifty-acre fields, reddened with enormous products, send many hundred

bushels of strawberries daily into the other. If, instead of keeping three days, sorts were now added that would keep three months, many times the amount would be needed. But the market would not be confined to large cities. Rail roads and steamboats would open new channels of distribution throughout the country, for increased supplies. Nor would the business stop here. Large portions of the eastern continent would gladly become purchasers as soon as sufficient quantities should create facilities for a reasonable supply. Our best apples are eagerly bought in London and Liverpool, where nine dollars per barrel is not an unusual price for the best Newtown pippins. And by being packed in ice, Doyenne pears gathered in autumn, in New York, have been sold at mid-winter in Culeutta—peaches have been safely sent to Jamaica, and strawberries to Barbadoes. The Baldwin apple has been furnished in good condition in the East Indies, two months after it is entirely gone in Boston.

Good winter apples always command a market. For the past thirty years, such fine varieties as the Swar, Rhode Island Greening, Esopus Spitzenburgh, have scarcely varied from twenty-five cents a bushel in some of the most productive portions of our country, remote from market. Late keepers are sold in the early spring for triple that sum. An acre of forty good trees, with good culture, will average through all seasons not less than two hundred bushels, or fifty dollars a year. Instances are frequent of three this amount. The farmer, then, who sets out twenty acres of good apple orchard, and takes care of it, may expect at no remote period a return of five to fifteen hundred dollars a year, and even more if a considerable portion is occupied with late keepers. This, it is true, is more than the majority obtain; but the majority wholly neglect cultivating and enriching the soils of their orchards.

It is not, however, merely as a source of income, that the cultivation of the finer kinds become profitable. The family, which is at all times supplied with delicious and refreshing fruit from their own gardens, have within their reach not only a very important means of economy, but of real domestic comfort. An influence is thus introduced of an exalted character; a tendency is directly exerted towards the improvement of the manners of the people. Every addition to the attractions of home, has a salutary bearing on a rising family of children.—The difference between a dwelling with well planted grounds, and well furnished with every rural enjoyment, and another where scarcely a single fruit tree softens the face of bleakness and desolation, many in many instances, and too many a young man just approaching active life, serve as the guiding influence between a useful life on the one hand, or a roving and unprofitable one on the other—between a life of virtue and refinement from early and favorable influences, or one of dissipation and ruin from the overbalancing effects of a repulsive home. * * *

Bushes, Briars, Brambles.—Cut these up and burn them—they have too long been tolerated on your farm—their vigor marks the slovenly farmer—their destruction the notable one.

EDITORS' TABLE.

DIED, at his residence, in St. Stephen's Parish, on the 8th of May, Major SAMUEL L'ORCHER, in the 84th year of his age.

Esteemed by his friends, and beloved by his relatives, during a long and useful life, he sunk into his grave without a murmur and without a struggle. Virtue, industry, economy and charity, with a firm belief in the mercies and goodness of his Creator, and a positive faith held out for the life to come, were his chief characteristics.

It is becoming that the demise of one, who devoted so long a life with so much intelligence to the pursuit of agriculture as the subject of the foregoing obituary, should be recorded upon the pages of the agricultural journals at least of his own State. Every paper exclusively devoted to rural pursuits that has ever been published in the South, we believe, bears the record of his remarkable success as a planter and farmer. His mind seemed to have the rare faculty to comprehend grand schemes of improvement and the minute details of husbandry equally well, and all harmonized profitably together under his direction. Our readers will recollect that we have had the satisfaction, within the last year, of laying before them several communications from his pen to the Farmer and Planter, and other papers read to the agricultural society of his neighborhood. It has no doubt occurred to them as to us, how seldom it is that we read papers written with so much vigor and earnestness as these, by one who has borne the storms of a life of four score years and four. Mortality has at last yielded, but not without a hope of something yet to come. Senators, Cabinet officers, and Ministers Plenipotentiary will succeed each other and pass away, leaving nothing to recall the memory of them or the good they have done to mankind, but the embankment of Santee, will stand a monument of the enterprise and foresight of its projector, to honor the name and stimulate others to follow a praiseworthy and noble example.

THE JUNE number of the *Southern Planter* has come to us clad in mourning and announces that its late editor, RICHARD BARNES GOOCH, is no more. He died on the 13th of May last, in the 31st year of his age. This announcement has given us pain in as much as we had formed an agreeable editorial acquaintance with the deceased, and had placed a high estimate upon his capacity. He was a man, says the obituary writer, "of sterling principles, but of extreme amiability of character." He succeeded in making the journal in his charge interesting, able and useful. As some evidence of its merit, the paper, in years, has entered upon the second decade of its existence, and we hope it has not yet reached its maturity. It has been said by a great English author, "the King never dies. Henry, Edward, or George may die, but the King survives them all." So let it be said, the agricultural journal never dies. Buel, Camak, or Skinner may die, but the agricultural journal survives

them all. The "*Plow, Loom & Anvil*" has lately suffered from the loss of its "veteran editor" John S. Skinner, but it will continue to be published.

The proprietor of the *Southern Planter* informs his subscribers that the publication of his paper will continue as heretofore. He is making arrangements to fill the vacancy caused by the death of its late editor, and there will be no interruption of the issue the first of every month.

FARM JOURNAL.—The first, second, and third numbers of this work have come to hand and we with pleasure place the name on our exchange list. The Journal is well got up, and the progeny bears the marks of a manly parentage.

AMERICAN FARMER.—This paper has completed its sixth volume and commences its seventh with the month of July. The publisher announces that its patronage is continually increasing, and that the prospects of the coming volume are flattering. He offers several prizes, with fifty dollars at the head for the largest number of subscribers. This system of obtaining patronage has become very general.

NEWS-PAPER.—Another handsome political journal has sprung up at Unionville, this State, styled the *Unionville Journal*, edited by R. A. McKnight.

NEW SUBSCRIBERS.—We tender our acknowledgments to W. A. ANCRUM, of Camden, S. C., for thirteen new subscribers, with the money.

NEW POSTAGE LAW.—The postage on the *Farmer and Planter*, will, after the first day of July (it weighing less than 1½ ounces), be as follows:

50 miles or less,.....	2½ cts. per annum.
Over 50 and less than 300,...	5 " " "
Over 300 and less than 1000,...	7½ " " "
Over 1000 and less than 4000	10 " " "
Over 4000.....	15 " " "

CORRESPONDENTS, &c.—We are gratified with the communication from our correspondent, "Bacon Hollow," and shall duly appreciate the favor which he promises, of sending shortly a list of subscribers in addition to the one we now have from his section. If our friends generally would use a very little exertion in our behalf, as they move among their neighbors, they probably would not feel the inconvenience, and we should gain new strength, and be able to make improvements in our journal and increase its usefulness. We have more than once expressed our gratification at the number and character of correspondents that have for eight months contributed to the interest of the *Farmer and Planter*, but have doubts whether we have done it sufficiently emphatic or not in justice to them and ourselves. As an evidence of our confidence in the merit of the contributions to our paper, we should not be unwilling that this department be compared with the same department of the best papers published in any quarter of the States. It is hoped we may have an unabated flow of communications from the old, and the young planters of all parts of the South, and we most assuredly shall be well pleased, if through the exertions of friends we receive weekly a large increase of subscribers. If the question were left for us to decide,

we should have no hesitation in giving judgment that the paper deserves a much greater circulation than it has. It however must abide its time, and ultimately if it merit an unequivocal support, it will receive it, we hope.

ACKNOWLEDGMENTS—We return our thanks to those in charge of the Smithsonian Institute, at Washington, for valuable documents received from their hands. Their courtesy deserves more than a passing notice. Agriculturists will ere long owe this Institution a debt of gratitude not easily cancelled.

POMOLOGICAL CONGRESS—We have received, from some person unknown, a report of the proceedings of this body at its session of last autumn, in the city of Cincinnati. It is a pamphlet of 79 pages, and certainly of great value to the pomologists of the North and West.

VIRGINIA ADVANCING—In our last issue we noted the fact that North Carolina had taken a step forward in the direction of agricultural improvement. We now add that Virginia has joined her in the move by appointing for herself a State Chemist. Of the Southern States, Maryland, Virginia, North Carolina, Alabama, and Mississippi, have State Agricultural Chemists.—When will the rest of us co-operate?

FAIR—In our last we noted that the "Southern Central Agricultural Association" will be held in the city of Macon, Ga., on the 29th, 30th, and 31st of October next. A committee, of which C. A. Peabody is chairman, has put forth an address to the "Planters, Manufacturers, and Mechanics of the South," inviting all to join in making the occasion a grand exhibition of every thing of interest to the Agriculturist and Mechanic. The report taken from the Soil of the South, says:—

"The inducements held out by the city of Macon for the Fair, are all that reasonable men could ask. In addition to the four thousand dollars subscribed, the citizens offer their private houses for your wives and daughters; extensive grounds for the exhibition of stock; spacious buildings for the protection of goods; and in order that machinery may be exhibited to the best advantage, a superior steam engine will be put in operation, sufficient to drive all the machinery that may be exhibited. The different rail road lines will transport all the stock and goods free of charge, and passengers for the Fair at half prices. Arrangements are making on a scale of liberality never before equalled at the South, to make it a great Southern jubilee.—Come, then, farmers, manufacturers, mechanics and all. If there is anything omitted in the premium list, the committee will take pleasure in inserting it. Discretionary premiums will be given to all articles of merit that are not embraced in the premium list. Salesmen will be employed by the society to sell, free of charge, all stock or goods which may be offered, and we earnestly invite every branch of Southern industry to be represented in Macon."

WHEAT—Farmers in this region, and as far west as Rome, Georgia, from which place we have just returned, have had an unusually abundant harvest of this grain. The kernel is invariably large and heavy. The best field seen during our tour was that of L. B. Hawkins, on Raccoon creek, Cass county, Ga. The second was that of Col. J. E. Foster, at Rowlands Ferry,

of the same county. Wheat, so far as we have heard, has entirely escaped the rust, but has suffered from the smut on many plantations. Thus, we suppose, is not regarded as a matter of much consequence, otherwise, wheat planters would use the preventive. No evil is more easily avoided.

COTTON is not large for the time of year, but the stand is generally very good. From the drought and hot sun, the plant is likely to bloom early and be precocious in maturing. It has the appearance of doing so now. The best cotton seen, the field through, was that of Mr. Conyer on Raccoon creek. We were particularly struck with the stand and general appearance of a field situate on the rail-road from Kingston to Rome, owned by Col. A. F. Wooley. The culture was as clean and handsome as a garden. If our journal could reach the planters of this region, we should urge the importance of hill-side ditching upon their rolling lands. We observed that the soil is rapidly washing off into the Etowah, and the lands will be ruined before the owners have any anticipation of it.

CORN looks well except it is small. On the river and creek bottoms, of this neighborhood, the bud worm has been very troublesome and prevented a good stand, notwithstanding in some instances the land has been re-planted as many as four times.

THE OAT CROP is almost an entire failure.

GARDEN FRUITS—The Raspberry bush has been loaded, and the Strawberry vine red with fruit. Grape vines are promising. Of Figs we have a better crop than usual.

THE MEASURE of a Cabbage thirty-four inches across the head from extremity of leaf to extremity, has been handed into our office by Mr. H. Campbell.

THE PEACH tree promises an abundance of good fruit.

APPLES, generally, are a failure.

PEAR trees have an average quantity of their most delicious fruit.

PLUMS are generally deficient. They have fallen from the tree.

Mechanics' Convention.

On the 13th, 14th and 15th of August the Mechanics of the State of Georgia will hold a meeting at Atlanta.—What the precise object is we are not informed, but take it for granted it is to hold a consultation upon the best manner of promoting the mechanic arts. If this is the object it is a most commendable one, and every citizen in the State that moves the Plane, lifts the Adz, raises the Hammer, or wields the Brush ought to be present and participate in the counsels. If he cannot suggest to and instruct others, he can listen and learn. In our judgment it would be sound policy for rail roads to convey the members if not absolutely free, at greatly reduced fare. There is too little interchange among mechanics; a better understanding ought

to prevail among them, and more concert of action ought to exist. The advancement of the mechanic arts is the advancement of every body. Show us intelligent mechanics and we will show you a prosperous people.

Since the above was indited we learn the convention is not to be one of mechanics exclusively, but of agriculturist, mechanics, and manufacturers; and is styled the "*Georgia State Agricultural, Mechanical, and Manufactural Association.*"

Information Wanted.

MESSRS. EDITORS.—Can any of the readers of the Farmer and Planter tell me if a crop of corn, or wheat, or oats, on sandy-land, will be benefited by a subsoil plowing of the land, and will not the land be materially injured by such plowing. The land in question is principally what we term Black-jack sand-hills; some parts have a thin grey, and some a mulatto soil. The subsoil a bright yellow sand to the depth of three to six feet to clay. The whole pretty fine, no pimples, a large proportion of flour, when washed out, leaves a pale yellow sand of a flinty appearance, some portions leave a very white sand, and a larger proportion of it. This is of the greyer or lighter quality. This land is soft and easily cut when first brought in to cultivation; it gradually forms a close hard layer, commencing at the lower part of the tith depth, and extends some six or ten inches down, gradually softening, until it comes to its original consistency.—Will experience and science speak, and say what they think of subsoiling in this case? How would this do? With a turning plow, (for a commencement for a grain crop) the first year turn one inch deeper; with a subsoil stir one-third or one-half of this hard under-lay? Then in the preparation for each crop, in succession, turn one inch deeper and subsoil two or three inches deeper, until a sufficient depth was gained, taking care to manure as much as possible, and turn under all vegetable matter that should grow on the land—I mean the refuse of the previous crop? By this process could we not, in a few years, have a much deeper and more productive soil—a soil that would retain manure much longer and stand a drought much better, making us more than double the yield of fruit, and by a judicious rotation, and a guard against washing, continue to yield an abundant harvest for ages.

It is best not to stir sandy land until we want to plant it, then stir—mix well,

and put your seed right in, as much of the very best quality of the soil is washed and blown away early in the spring, or latter part of winter.

"Broomsedge" and "Pry," certainly have thrown much light on the subject of planting in their controversy on burning woods. As soon as I am done plowing this summer, I am going just over the fence—where pine straw and burs, oak leaves, oak limbs and chunks, grass, weeds and surface, all come up in heaps like potato banks. Next winter, some calm evening, just after a soaking rain, top of banks dry, I will start my torches from bank to bank—half consumed, haul them right into my field, and mix them with a deeply broken soil. Then if my crop does not grow as well as it would out of a good sprinkle of guano, gypsum and lime, or even compost from the horse lot, I have very much misunderstood Broomsedge, Pry, and others. I give them timely notice, and if they suffer me to go on ignorantly and lose all that labor, I will charge them by 50 cts. per day per hand.

It does not look probable that I ever should see this imperfect thing in the Farmer and Planter, or that any of its able contributors should ever notice it—and should it be so, it will not lessen my esteem in the least with any of them—but to help the needy, and strengthen the weak is a moral duty, and as I am illiterate and poor, I take encouragement.

Respectfully yours,

PLOUGH BOY.

REMARKS.—From the character of the sub-soil of the land described by our correspondent, "Plough Boy," we should not advise, at first, the use of the sub-soil plough. Not that we should fear injury from the operation, but we should consider it unnecessary. After the "close hard layer" (pan) is formed, however, there can be no doubt of the beneficial effects of the sub-soil—both for the purpose of allowing the escape downwards of a superabundance of water, and for giving the roots of plants a deeper range to feed in.

The plan proposed for gradually deepening the soil is the proper one, but should be pursued very cautiously on such land without a liberal supply of manure to the freshly turned up sub-soil.

No doubt the intended application of the half-burned pine straw, leaves, &c., will prove highly beneficial to the land, but with a due proportion of vegetable matter already in the soil from the turning of the refuse of previous crops, weeds, &c., we should prefer reducing the "piles" at once by the rapid decomposer—fire, and applying the ashes only. For an immediate effect, ashes will be found the most valuable application on all such

lands as described by our correspondent.

We advise our friends, Pry and Broomsedge to attend to Plough Boy's case without delay, lest they may lay themselves liable for losses incurred by misapplication of the labor of his hands; and we protest in advance by giving the above notice against incurring a like liability.---Eds.

Plank Roads.

THEIR CONSTRUCTION.—In the most generally approved system, two parallel rows of small timbers (called indifferently, sleepers, stringers or sills) are imbedded in the road, 3 or 4 feet apart. Plank eight feet long, and three inches thick, are laid upon those sticks across them at right angles to the direction. A side track of earth, to turn out upon, is carefully graded. Deep ditches are dug on each side to insure perfect drainage; and thus is formed a plank road.

LAYING THEM OUT.—In laying out a plank road it is indispensable in order to secure all the benefits which can be derived from it, to avoid or cut down all steep ascents.

A very short rise of even considerable steepness may, however, be permitted to remain, to save expense; since a horse can, for a short time, put forth extra exertion to overcome such extra increased resistance; and the danger of slipping is avoided by descending upon the earthen track.

A double track will rarely be necessary.

No one without experience in the matter can credit the amount of travel which one such track can accommodate. Over a single track, near Syracuse, over 160,000 teams passed in two years, averaging 229 teams per day. The earthen turn-out track, must, however, be kept in good order, and this is easy if it slope off properly to the ditch, for it is not cut with any continuous ruts, lengthwise, but it is only passed over by the wheels of the wagons which turn off from the track and return to it. They move in curves; which rarely exactly hit each other, and such travel, being over the earth, tends to keep it in shape, rather than disturb it.

COVERING.—The planks having been properly laid, as has been directed, should be covered over an inch in thickness with very fine gravel or pebbles, from which all the stone and pebble are to be raked, so as to leave nothing on the surface of the road that could be forced into and injure the fibres of the planks. The grit of the sand soon penetrates into the grain of the wood and combines with the fibres and the droppings upon the road to form a hard and tough covering like felt, which greatly protects the wood from the wheels and horse shoes. Sawdust and tanbark have also been used.

The road is now ready for use.

LAYING.—The planks should be laid directly across the road at right angles, or "square" to its line. The ends of the plank are not laid evenly to a line, but project three or four inches on each side of the plank-track, and make it easier for loaded wagons to get upon it, as the

wheels, instead of scraping along the ends of the planks when coming forward the track obliquely after turning off, will, on coming square against the edge of those projecting planks, rise directly upon it. On the Canada roads every three planks project three inches on each side of the road alternately.

DURABILITY.—A plank road may require a renewal, either because it has worn out at top by the travel upon it, or because it has been destroyed at the bottom by rot. But, if the road has travel enough to make it profitable to the builders, it will wear out first; and if it does, it has earned abundantly enough to replace it twice over, as we shall presently see. The liability to decay is therefore a secondary consideration on roads of importance.

DECAY. As to natural decay, no hemlock road has been in use long enough to determine how long the plank can be preserved from rot. Seven years is perhaps a fair average. Different species of hemlock vary greatly; and upland timber is always more durable than from low and wet localities. The pine roads in Canada, generally last about eight years, varying from seven to twelve.—The original Toronto road was used chiefly by teams hauling steamboat wood and at the end of six years began to break through in places, and not being repaired, was principally gone at the end of ten years. Having been poorly built, badly drained, not sanded, and no care bestowed upon it, indicated the minimum of durability. Oak plank crosswalks are in Detroit, the plank being laid as flat as those of pine. It is believed that oak plank, well laid, would last at least ten or twelve years. One set of sleepers will outlast two plankings.—Several Canada roads have been relaid upon the old sleepers, thus much lessening the cost of renewal.—*Scientific American*.

How to Cure a Cold.—Of all other means of curing colds, fasting is the most effectual. Let whoever has a cold eat nothing whatever for two days, and his cold will be gone, provided he is not confined to his bed—because by taking no carbon into the system by food, but consuming that surplus which caused his disease by breath, he soon carries off his disease by removing the cause. This will be found more effectual if he adds copious water drinking to protracted fasting. By the time a person has fasted one day and night, he will experience a freedom from pain, and a clearness of mind, in delightful contrast with that mental stupor and physical pain caused by colds. And how infinitely superior is this method of breaking up colds, than medicines, especially, than violent poisons.

CONTENTS OF THIS NUMBER.

Rise and fall of Sap in trees.....	Page 81
Treatment of Scarlet Fever.....	" 82
Deep Soil and deep Roots.....	" 83
Yellow Clover.....	" 82
Information Wanted.....	" 94

A Chicken with four Legs.....	83
Report on Manures.....	83
Cure for Glanders.....	86
Review of the May No.....	86
Brass Kettles.....	87
Planting Cotton.....	87
Buck-wheat.....	87
Agricultural Improvements.....	88
Mode of Cotton Planting.....	89
The practical use of Leaves.....	89
Southern Lands, Emigration, &c., &c.....	90
The Gooseberry.....	91
Fruit Trees.....	91
A Cow with her first Calf.....	91
Horse Shoeing.....	91
Depredations of the Crow.....	91
Enquiry.....	92
Importance of Home Duties.....	92
Profits of Fruit.....	92
Mutton Broth.....	93
Editors Table.....	93
Plank Roads.....	95
Beef Tea.....	95
To make Liquid Glue.....	95

DISSOLUTION.

THE firm of Walker & Coleman is this day dissolved by mutual consent. M. W. Coleman will attend to the settling the business of the late firm.

G. WALKER.

M. W. COLEMAN

Hamburg, March 24, 1851.

A CARD.

THE SUBSCRIBER will continue the business as carried on by Walker & Coleman, and hopes by prompt attention to business, with a competent assistant in the forwarding department, to receive a continuance of the liberal patronage bestowed on the late firm of W. & C.

M. W. COLEMAN.

Hamburg, March 24, 1851.

A CARD.

IN RETIRING from the late firm of Walker & Coleman, I take pleasure in recommending to my friends and the public, my friend and partner, M. W. COLEMAN, and hope that he may receive a continuance of the liberal patronage received by the late firm. I will continue the Ware House and Commission Business in Augusta, Georgia.

G. WALKER.

Hamburg, March 24, 1851.

PROSPECTUS

OF THE

FARMER & PLANTER For 1851,

A MONTHLY JOURNAL,

DEVOTED TO THE AGRICULTURE OF THE SOUTH,

AND ESPECIALLY ADAPTED TO ITS CLIMATE, PRODUCTIONS AND WANTS.

THE second volume will commence February 1851. Each number will be mailed on or about the first day of every month in the year, and will contain SIXTEEN ROYAL QUARTO PAGES, printed on new type, in the best manner, and on beautiful strong paper suitable for binding.

The twelve numbers will make a handsome volume of nearly two hundred pages in Royal Quarto form, ILLUSTRATED with

numerous **SPLENDID ENGRAVINGS** of Animals of the best breed, Rural Architecture, Fruits, Cuts of the latest and most approved style of Agricultural Implements and Machinery.

The Editors are determined to make it worthy of the South and South-West, and have the pleasure to announce that they will be assisted in the conduct of the Second Volume by many of the best planters in South Carolina, Georgia, Alabama, Mississippi, Texas and Virginia.—It is believed no Agricultural paper in the United States can present the names of an abler corps of correspondents, than will contribute to this during 1851. Its contents will embrace a large amount of original matter, with choice selections entirely suited to the Southern Atlantic and Gulf States.

The increased expenses of this volume which will be incurred by the cost of ENGRAVINGS, CUTS, and PRIZE ESSAYS to make it complete and unsurpassed, and the low price at which it is offered, oblige the FARMER AND PLANTER to make its appeals for that support it merits, to the whole body of those engaged in Southern Agriculture.

Of those who have manifested an interest in the success of the FARMER AND PLANTER, the Editors retain a grateful recollection, and respectfully solicit their further co-operation to enlarge the circulation of the paper.

All who feel a desire that this work should be sustained, and a concern for the advancement of Agriculture are invited to subscribe themselves, and enlist as far as possible the patronage of their neighbors.

TERMS:

1 copy, one year, (in advance).....	\$1
6 copies " " directed to one office, 5	
25 " " " " " " " " " " " "	20
100 " " " " " " " " " " " "	75

Post Masters throughout the country are particularly solicited to act as agents for the paper in procuring subscribers and forwarding names to the proprietors.

SEABORN & GILMAN,

Editors and Proprietors.

Pendleton, S. C., Nov., 1850.

WHITMAN'S AGRICULTURAL WAREHOUSE, BALTIMORE, MD.



THE UNPRECEDENTED and INCREASING INTEREST manifested in AGRICULTURE, and the liberal encouragement which has been given the subscriber, has induced him to engage in the MANUFACTURING business on an EXTENSIVE SCALE. His Factory and Warehouse is now the largest in Baltimore, and probably the most extensive in this country.

His stock for 1851 will consist in part of: 10,000 PLOUGHS embracing his PRE-

MIUM PLOUGHS, and nearly every variety in use from Maine to California.

600 WHITMAN'S PREMIUM CULTIVATORS, at \$4, \$5 and \$6 each.

150 HARROWS, at 6, 7, 8, 9, 10, 11 and \$12 each.

500 PREMIUM STRAW, HAY and CORN-STALK CUTTERS, at 10, 12, 17, 23, 28 and \$37 each.

100 PREMIUM FODDER CUTTERS and GRINDERS, at 30, 35, and \$60.

100 PREMIUM CORN AND COB CRUSHERS, (the best in use) at \$50.

2000 WHITMAN'S PREMIUM CORN-SHELLERS, at 10, 16 and \$18.

2000 PREMIUM WHEAT FANS, GRANT'S and BAMBOROUGH'S (which cannot be equalled) at 25, 28, 30, 32, and \$35.

100 WROUGHT IRON RAILWAY HORSEPOWERS which received the FIRST PREMIUM at the Maryland State Fair in 1849 and 1850.—Price \$100

100 SWEEP POWERS of the most improved plans—Price 90 to \$120.

100 ONE WHEEL or EDDY POWERS, enlarged and improved.—Price \$100.

300 WHITMAN'S PREMIUM THRESHERS the cylinder of which we will warrant to last 100 YEARS, in constant use. This machine breaks less grain and threshes cleaner and faster than any other machine in use.—Price 45 and \$50. Additional price for STRAW CARRIERS, \$15.

100 WHEAT DRILLS which are perfect in their operation, and save enough in the seeding of fifty acres to pay the cost of the Drill.—Price \$100.

100 CORN-PLANTERS, a great labor-saving implement.—Price \$20

50 FIELD ROLLERS, which received the FIRST PREMIUM at the State Fair, at 30, 40 and \$50.

REAPING MACHINES, the best in use, price \$125.

BURR STONE CORN MILLS—Price 90 to \$120.

A large stock of Chain and Suction Pumps, Water Rams, Ox-Yokes, Root-Pullers, Sausage-meat Cutters and Stuffers, Cow-Milkers, Churns, Post-hole Augurs, Agricultural Furnaces, Hoes, Rakes, Shovels, Spades, Garden and Horticultural Tools, and every description of Farm Implements found in this country.

—ALSO—

FIELD and GARDEN SEEDS of every variety.

FRUIT and ORNAMENTAL TREES.

GUANO, and all the various kinds of FERTILIZERS in use, all of which will be sold at WHOLESALE and RETAIL as low as can be had in the United States, the quality considered.

A Catalogue of 120 pages, containing a description of our Implements and Machinery, will be forwarded gratis, if applied for by mail post paid—and all orders accompanied with cash or satisfactory references, will meet with prompt attention.

EZRA WHITMAN, JR.

corner of Light and Pratt Sts.,

BALTIMORE, MD.

January 1, 1851.